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A week in photography

While I'm lamenting the end of 2018's wonderful summer, I'm simultaneously excited by the onset of what is without question the prettiest season for

photography. Since last autumn your creative eye may well be as rusty as the leaves now covering the ground, so we asked our macro expert Tracy Calder for a refresher on how to shoot great

autumnal close-ups. Elsewhere John Wade looks

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back at early digital cameras. I remember getting excited about some of these models when they came out, which seems laughable now. How fast technology has progressed! You can barely give some of these cameras away now, but remember: today's junk is tomorrow's treasure. If you enjoy this issue why not treat yourself to a subscription – you'll save money and get it delivered. Details are on page 63. Nigel Atherton, Editor









Dancing Feet by Steve Colton

Nikon D500, 150-600mm, 1/2500sec at f/6.3, ISO 500

This puffin portrait was uploaded to Instagram using the hashtag #appicoftheweek. It was taken by photographer Steve Colton. He tells us, 'This photo was taken on the Farne Islands during a holiday touring the North of England. It's a fantastic place, full of nesting seabirds, kittiwakes, cormorants, razorbills and, of course, puffins a nature lover's and photographer's

paradise. It was a very bright but cloudy day, and extremely windy. After capturing the usual puffinwith-sand-eels and flying shots, I wanted to look for something different. I spotted this fellow on his own, side stepping along the cliffs edge, their ungainly bobbing movement almost looked as if he was dancing in step. It was exactly the shot I wanted.'

ROFESSIONAL INKLIET MEDIA

Each week we choose our favourite picture on Facebook, Instagram, Flickr, Twitter or the reader gallery using #appicoftheweek. PermaJet proudly supports the online picture of the week winner, who will 🙎 receive a top-quality print of their image on the finest PermaJet paper*. It is important to bring images to life outside the digital sphere, so we encourage everyone to get printing today! Visit www.permajet.com to learn more.

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NEWS ROUND-UP

The week in brief, edited by Geoff Harris



Camera World LIVE is back

The major retailer is running its London show again on 27 October, to include recently announced full-frame mirrorless models and Photokina launches (CameraWorld claims there will be some exclusive UK firsts). Experts and pros will be on-hand to advise and give workshops. It runs from 10am to 5pm, at 155 Bishopsgate, London, EC2. See www.cameraworldlive.co.uk.

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Fflordes' Leica stock stolen

Second-hand specialist, Ffordes, suffered a break in last month, with £160,000-worth of Leica cameras and lenses taken. Ffordes' Alister Bowie warns readers to be careful if you get offered any Leica gear without boxes, accessories or paperwork. Contact the company or the police if you have any information, and see www.facebook.com/ffordesphotographic for further updates.

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Leica launches black Sofort

With the £275 Sofort instant film camera being the cheapest way to get a pukka Leica, the company announced a black version at Photokina (albeit with SOFORT written in white across the body). The Sofort takes Instax mini film, giving you credit-card-sized prints measuring 54x86mm, with an image area of 46x62mm. There are four shooting modes: Automatic, Party & People, Sport & Action, and Macro.

Google Images to include credit data

Google Images is adding credit metadata to images in search results, following a collaboration between the search-engine giant and photo industry consortium CEPIC, and IPTC. 'It's traditionally been difficult to know the creator of images on the web, as well as who might own the rights,' said Google. 'This information is often part of image metadata, and is key to protecting image copyright and licensing information. While this won't stop anyone stealing your photos, it will hopefully mean more get rightfully credited. Copyright notices on images are also reportedly planned.



EOS R mount adapters announced

MTF Services claims it has developed the world's first Canon EOS R Mount adapters, including ones for Canon FD and Nikon G lenses. MTF claims the adapters will be made from HE30 aluminium throughout the main body, and feature British craftsmanship and build quality. For more information, go to www.mtfservices.com.



BIG

What does 'multilocalism' mean to you?

This intriguing picture – a composite image of two different locations – was created by British conceptual photographer James Popsys for Adobe Stock to celebrate its recent Multilocalism 'Visual Trend'.

Multilocalism stems from the idea that, for some, the question 'Where are you from?'



can be difficult to answer; for example, if you were born in one country, but have parents born in two others. Popsys' image is designed to highlight what the term means to him – it merges one of his local views of Manchester at rush hour with a travel stock photo of Skógafoss, the Icelandic waterfall. You can discover how it was created, with tips on how to make your own version by visiting http://bit.ly/multilocaltutorial.

Words & numbers

When we are angry or depressed in our creativity, we have misplaced our power

Julia Margaret Cameron
British photographer (1815-79)







Elements/Premiere Elements upgraded

AS THE AP *Inbox* pages have proven a number of times, many readers prefer to use Photoshop Elements to edit their photos rather than Adobe Photoshop or Lightroom CC. A new version, Photoshop Elements 2019, has recently been released. The key features include a new Home Screen, which guides users through updates and improvements, while providing inspirational ideas and slideshows. According to Adobe, it 'offers a personalised experience by surfacing info on what's new since your last version of Elements and content suited to your level of expertise'.

It has become easier to make photo collages too, so you can

create collages with fewer clicks and choose from new templates designed to enhance Instagram posts this is very much an update for the social-media age. You also have the ability to customise your photo collages by adding frames and changing backgrounds. There are now 53 step-by-step photo-editing guides

enabling you to create sophisticated text effects for photos, make fun memes and more. Changing backgrounds or straightening



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horizons has also been made simpler, and you can now combine faces and bodies from a series of pictures to create a single composite. It is now also easier

to add artistic effects to images, including double exposures, water colour stylings and more. Adobe claims the performance and responsiveness of the new Photoshop Elements has been beefed-up as well.

You can buy the program as a standalone product rather than via subscription, and it costs £86.56 (£70.91 upgrade price) including VAT. It's available now, along with a revamped version of Premiere Elements for video editina.

This also has new guided edits, bringing the total to 20, including glass plane effects and Luma fade transitions, which walks you through the process of fading in the colours from darkest to lightest in videos. The new standalone version of Premiere Elements is also £86.56.



Zenit reveals the M digital rangefinder

ZENIT is a name well known to many AP readers, and the recently revived brand used September's Photokina show to unveil a full-frame rangefinder. The camera is called the Zenit M and is based on the Leica M (Typ 240), so it was created in partnership with the German camera manufacturer.

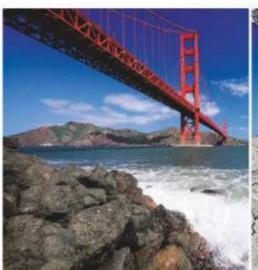
Zenit says it has made hardware and software tweaks, so it's not just a retro-sounding rebadge. The Zenit M will feature a Zenitar 35mm f/1 lens, designed in Russia rather than Wetzlar, and the new camera will go on sale as soon as December this year. It's a limited edition of only 500 cameras: 450 silver and 50 black. More specifications and pricing details as we get them.

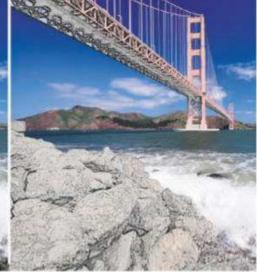


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Photoshop Elements 2019 features a wide range of artistic effects



Worrying rise in deaths from selfie-taking

NEARLY 260 people worldwide have died trying to take selfies between 2011 and 2017, according to a recent study from the US National Library of Medicine. The researchers, who presented their findings in the Journal of Family Medicine and Primary Care, claim the actual number could be much higher, since the cause of death is not always put down to selfie-seeking or self portraits. 'It is believed that selfie deaths are underreported and the true problem needs to be addressed,' the study said,

pointing out that people who were hit by cars as they posed were often classified as victims of traffic accidents.

Predictably, death by falling was particularly common, along with drowning and accidents involving transport. Other selfie mortalities were caused by ill-fated encounters with guns, animals and electricity. Most of the selfie deaths identified in the report involved male victims, with the average age being 23. Most of the deaths found in the study occurred in India (159), Russia (16)

and the USA (14). India has a large number of citizens under 30, which the researchers reckon could account for this relatively large death toll.

As well as wanting more selfie-related deaths to be classified as such, the researchers recommend setting up no-selfie zones in popular beauty spots or tourist magnets, such as the tops of mountains and tall buildings. Even if you don't take selfies yourself, be very careful when out with your camera, particularly as winter brings darker days and harsher weather.

Ricoh expands GR compact range

PENTAX-OWNER Ricoh has announced its GRII compact camera will be updated in 2019. The Ricoh GRIII will include a 24.2 MP APS-C sensor and new image engine, raw shooting and 3-axis image stabilsation, backed up by a 28mm equivalent f/2.8 lens. The ISO range is yet to be confirmed and the GRIII lacks a built-in flashgun or the ability to record 4K video, but you can now use Pentax-compatible TTL flashguns on the hotshoe. The GRIII is set to go on sale early next year, with pricing to be confirmed. For more information see www.ricoh-imaging.co.uk.

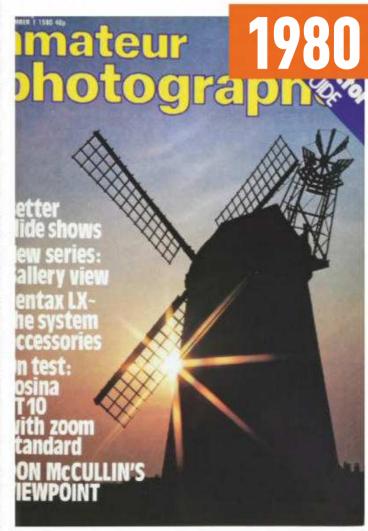


The GRIII will include a 24.2MP sensor and new imaging engine

For the latest news visit www.amateurphotographer.co.uk

Back in the day

A wander through the AP archive. This week we pay a visit to November 1980



WITH a major exhibition of Don McCullin's incredible documentary work scheduled to open on 5 February next year at Tate Britain, this is a timely issue of AP to look back on, as Sir Don was also featured in an article in this issue. He wasn't always regarded with quite so much reverence, however, and seems to have been damned with faint praise on the contents page. 'Don McCullin has an eye for the sordid side of life but has compiled an important photographic documentary.' It makes it sound like Don used to hang around seedy cinemas in Soho as well as cover major post-war conflicts and disasters, but perhaps the sub-editor was just off form that day... Other highlights include the Cosina CT-10 – an unusual package for the time as it was also supplied with a zoom lens – and a guide to system accessories for the well-regarded Pentax LX. More archival curiosities next week.



Sir Don McCullin has long been a stalwart of AP



Photo Stories

Changing perceptions

After years of misunderstanding, **Ola Alsheikh** wants the world to open its eyes to modern-day Sudan. **Angela Nicholson** finds out more

hotography played a huge role in highlighting the humanitarian crisis in Sudan during the 1980s and '90s. Even today, just a mention of the country's name to those of us over a certain age is enough to bring back memories of the many heartbreaking images shot during the Sudanese famine of 1998. But while those images may be seared into our brains so we can recall them as if they were yesterday, 20 years have passed. And thankfully, although our Western-world perception of Sudan may not have shifted much in that time, many things have changed.

This dated view of Sudan is something that Ola Alsheikh is acutely aware of, and she wants to update the world's opinion of her country through her photographs of modern Sudan. Her aim is to engage and connect the viewer with Sudan through environmental portraits and street photography; she wants to convey the true spirit of the place in the 21st century.

Working as a professional documentary and commercial photographer, Ola is often commissioned to photograph events such as festivals and celebrations. In some cases, these fit nicely within her personal project about documenting everyday Sudanese life, but she also spends a lot of her own time shooting in the streets and countryside. She wants to break Sudan's association with poverty and she often captures the more affluent side of life to show parallels with the Western world. Many people are surprised to discover that Sudan has equestrian clubs, for instance.

Female photographers, especially street and documentary practitioners, are still quite unusual in Sudan and this means many of Ola's subjects are surprised to see her behind the camera. That can be useful as Ola likes to interact with her subjects, but there are also times when, as a street photographer, she doesn't want to draw attention to herself. So she often swaps the Pentax K-3 that she uses for commercial work for a Fujifilm X-T10. The smaller-sized, quieter camera is more discreet,

allowing her to capture natural environmental portraits without disturbing anyone.

As well as everyday life, Ola aims to document the special events and celebrations in Sudan. Mawlid al-Nabi al-Sharif, for example, is a major celebration of the Prophet Muhammad's birthday in Sudan. The majority of Sudanese people get involved with the events that take place in public open spaces all over the country. It's especially important to Sufi Muslims, but non-Sufis usually attend the various religious activities and whole families enjoy the celebration. Ola's images capture the sense of community with free food, colourful costumes and dancing. It's a world away from the monochrome poverty that usually springs to mind.

Making a difference

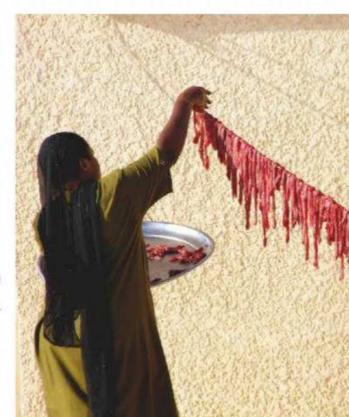
Despite the rarity of female documentary photographers in Sudan, Ola says she doesn't feel frightened or threatened when she's out with her camera. And male photographers are also very supportive of her. Many have been big sources of encouragement to her and other women photographers.

In fact, it was a male photographer friend who first got Ola into photography. She kept asking him to photograph the flower arrangements she made for Sudan's annual flower show and he suggested it might be better if she learned how to take the photographs she wanted herself. After a few lessons from him, Ola bought her first film camera in 1998, coincidentally the same year that Tom Stoddart took some of his most memorable images of Sudan. But it wasn't until 2010, when she bought her first digital camera that Ola started to take photography seriously. Reading around her then hobby, Ola realised the potential for photography to change lives, to really make a difference and to raise social awareness. A change in career from electrical engineering became the logical next step and her work is now attracting attention across the globe.

Equestrian sports are very popular in Khartoum







Ola Alsheikh trained as an electrical engineer but her flower-arranging hobby drew her into photography, and she switched careers to become a documentary and commercial photographer. See her work at **www.olaalsheikh.com**.



OLA'S KIT



OLA'S GO-TO camera for event photography is a Pentax K-3, often with a Pentax 55mm f/1.4 or a Tamron 70-200mm lens. However, she finds that her Fujifilm X-T10 attracts less attention when she's shooting street photography, so she likes to use that instead of the K-3. Pairing the X-T10 with a 35mm lens works well for her environmental shots while the XF 50mm f/2 R WR is a nice focal length for portraits. Ola also often carries a Fujinon XF 50-140mm f/2.8 R LM OIS WR lens to give her a bit more reach and greater flexibility with framing.



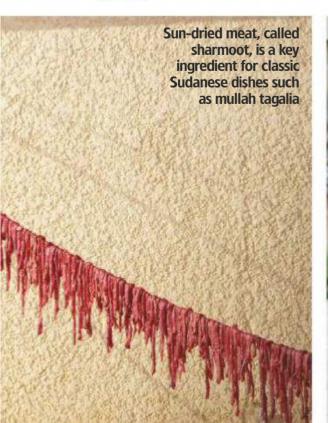


Left: Painter Sari Awad creates a mural showing humanity in harmony



Right: Damirga porridge, a traditional Darfurian dish, is served for free during Mawlid al-Nabi









iewpoint Amy Davies

It wasn't so long ago that Apple's ubiquitous iPhone was the cameraphone to beat. It's now playing catch-up with other players in the smartphone market

've been working as a writer in the photography industry for the lifespan of the iPhone, and it has, in many ways, been a fascinating journey to watch. I can vividly remember the very first iPhone arriving at the office where I worked back in 2008, while a crowd of enthusiastic journalists crowded around the table to gawp and stare at it.

For a long time, Apple traded on the idea that the iPhone was a bona fide camera for use by everybody, from amateur snappers all the way up to the professional working in the field. You may have been met with sneers if you turned up to a photographic outing with an iPhone but it started to become obvious that the old adage was right, the best camera was the one you had with you.

At one point, it was big news that the most popular camera on the photography social network Flickr was the iPhone (in fact, it still is). We might be able to put this down to the wide proliferation of 'proper' camera models, but for a site aimed so squarely towards people who took their photography seriously, it was an important indicator.

Then, a couple of years ago, I noticed other manufacturers began to target us



Impressive results from a smartphone. This picture was taken with the Huawei P20 Pro

'Perhaps most interesting has been the meteoric rise of Huawei'

photographers too. These days, we have four major players vying for our attentions, photographically speaking. There's still Apple, of course, but there's also Samsung, Huawei and Google. Samsung has always been a massive player in this market, but with its latest models sporting dual-aperture lenses and a professional mode, it's clear that it has a particular audience in mind.

Perhaps most interesting to witness has been the meteoric rise of Huawei, barely known a couple of years ago. Teaming up with the hugely respected Leica in 2016 has seen it produce easily the best cameraphone on the market. I've been using a P20 Pro since March and it's so good that I'm more than happy to be without a 'real' camera when it's just not practical.

Take a quick look at the DxOMark Mobile rankings for smartphones – despite several launches in the intervening time, the Huawei P20 Pro has yet to be dethroned from the very top since its announcement.

I'm writing this after Apple's recent announcement of its latest models. The iPhone XS and XS Max, at first glance, seem like incremental upgrades from their predecessor, and certainly don't grab my attention as a photographer as they once might have done. That said, now that DxO Mark has ranked the iPhone XS in second place, I'm interested to have a play and see what it can do.

It still goes without saying that Apple is going to sell its new phones by the bucketload, but with Huawei moving into second place behind Samsung in the sales charts (putting Apple in third), it's becoming obvious that the Californian company is no longer making a phone that every photographer automatically aspires to own.

Amy Davies is one of *Amateur Photographer*'s Features Editors, and previously has spent many vears writing for various photography titles.

Do you have something you'd like to get off your chest? Send us your thoughts in around 500 words to the address on page 24 and win a year's digital subscription to AP, worth £79.99

In next week's issue

On sale Tuesday 23 October



LANDSCAPE SPECIAL

Love of the land

Incisive critique from Charlie Waite of some of the winning pictures in Landscape POTY



Photokina 2018

All the major news from this year's biggest photography show

Past masters

Ailsa McWhinnie speaks to six previous winners of Landscape POTY

In your face

Tracy Calder reveals a 1980s overlooked body of work featuring close-up portraits



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Light source A portable LED light (like the Manfrotto Lumimuse 3) is ideal for lifting shadows under mushrooms and backlighting

leaves and insect wings. As it's a continuous light source you can see the effects before releasing the shutter.



Macro lens

When purchasing a macro lens consider the maximum magnification it can achieve (e.g. life-size, half life-size) and the minimum focusing distance (how close you can get to the subject before focusing becomes impossible).



РЕЛИЗ ПОДГОТОВИЛА ГРУППА "What's News" VK.COM/WSNWS





When the wind speed rises above 10mph it's often better to focus on stationary subjects such as bark, rather than leaves and flowers Fujifilm X-Pro1, 60mm, 1/50sec at f/8, ISO 1250, tripod



Tracy Calder

Tracy Calder has more than 20 years of experience in the photo magazine industry. She is the author of *Close-up & Macro Photography*, which has been reprinted numerous times, and is the co-founder of Close-up Photographer of the Year. Visit **www.cupoty.com**.

very autumn I lie on my belly in piles of decaying leaves and observe the world around me. Call me strange, but to my mind there's nothing better than adopting a worm's-eye view and breathing in the heady scent of a forest regenerating itself. If you lay still the forest will reveal its secrets: a twitch of leaves betrays a squirrel hoarding acorns, the missing chunk of a mushroom suggests a deer has passed by, a rotting tree stump shows itself as a bug hotel. The closer you look, and the stiller you become, the more you see. For more than a decade I have captured this magical world through my camera, using close-up and macro photography to explore details that are usually hidden from view.

Of course, lying on the ground when it's damp and littered with poo (I live near the New Forest where ponies, deer and donkeys roam and relieve themselves, freely) can be very unpleasant if you're ill-equipped, which is why one of the

Waterproofs

Waterproof trousers are a must when shooting fungi or leaf details. Over the years I've used bin bags, ground mats and picnic rugs, but you can't beat a pair of waterproof strides. I favour the Women's Cascada II Trousers from Páramo.



■ Beanbag

A beanbag can be purchased filled or unfilled, with lining or without. Wildlife Watching Supplies has a good range. You can fill a bag with dried beans, rice or corn, but if you want to avoid the contents rotting then opt for plastic pellets.



At high magnifications, any movement can cause image blur, so keep everything steady with a tripod and clamp or 'plamp' clipped to a leg. I use a plamp for holding plant stems and keeping distracting foliage out of the frame.

Technique autumn macro

'The best way to improve your close-up and macro photography is to slow down and give it some time'

first things I pack in my kit bag is a pair of waterproof trousers. I team these with a waterproof jacket and a pair of sporting gloves (these are breathable with excellent grip). When space allows I pop a mushroom ID guide into my pocket - having watched a rather disturbing episode of *Midsomer Murders* back in the noughties I'm not brave enough to forage for mushrooms, but I like to identify each variety for caption purposes. It's much easier to identify fungi 'in the field' rather than when you get home as it allows you to use the environment to draw conclusions - the fly agaric mushroom, for instance, is usually found under birch trees.

Studying the subject

Once I have located a photogenic specimen I study it from every angle. One of the joys of shooting small subjects is that you can often look down on them, as well as up under them. At this point I inspect the subject for any tears or blemishes – what looks like a tiny mark to the naked eye will appear magnified and hugely distracting in the final picture. When I have settled on a pleasing composition I check the background for potential distractions. If there are stray blades of grass, leaves or twigs I do some gentle 'gardening'. The tools of my trade are smaller than the average spade and trowel - I use tweezers to remove errant leaves, nail scissors to trim grass, and a paintbrush to remove dirt. If there are bigger distractions in the background (i.e. a plant stem or sizeable twig) I hold them out of the frame using something called a Wimberley Plamp. This strange-looking device is essentially a moveable arm with a large clamp on one end, which can be clipped to your tripod, and a smaller one on the other end, which can be used for holding a plant stem, leaf, petal, or even a diffuser or reflector.

If you're shooting leaves or other windblown subjects, the Plamp can sometimes be used to hold them steady, but if the wind speed rises above 10mph you're better off concentrating on static subjects such as bark or fungi. Alternatively, you could take a selection of leaves home and tape them to a window to create some lovely backlighting. When you've found a subject that's likely to stay put you need to make sure that your camera is nice and steady too. Generally speaking, the closer your camera (or to be more accurate, the sensor inside your camera) is to the subject the shallower the depth of field. This often means using small apertures and slow shutter speeds to maximise sharpness. When you're using slow shutter speeds camera shake is a risk,

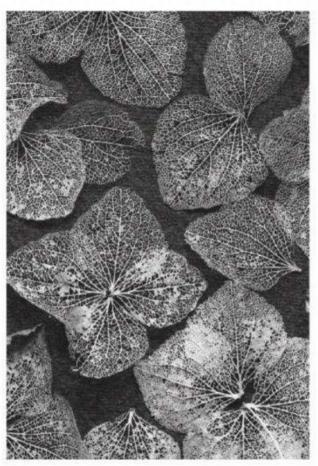
so a tripod is essential. I mostly shoot close to the ground so a tripod with a central column that can be used in the horizontal position is invaluable. When my subject is just inches from the forest floor I prefer to use a beanbag.

Refining the composition

With the camera attached to a tripod, the subject steady, and the 'gardening' complete I turn my attention to refining my composition. At this point it's worth remembering that all the standard 'rules' of composition still apply. While you might be working with subjects just centimetres in length you can still use the rule of thirds, lead-in lines, and different blends of positive and negative space to achieve a balanced image. I use live view for composing as it allows me to magnify an area of the frame and move it around checking all of the edges for potential distractions. My current camera is a Fujifilm X-T2 (although most of the pictures here were taken with a Canon EOS 40D and Sigma 105mm f/2.8 Macro lens, which I still use regularly), so in



TRACY'S TOP TIPS AND TECHNIQUES



Try black & white

When you're surrounded by rich autumn colour it's easy to overlook the skeletal shapes of trees and leaves, but these can make eye-catching subjects. Set your image quality to raw + JPEG and experiment with monochrome settings. For the best results, process the raw file later.



Check the edges

Grass, twigs and leaves can sneak into the frame when you're concentrating on the main subject. Most of the time you can crop these out later, but it's good practice to get things right in-camera. Use live view and magnify the focus area. Now pan around the frame, paying particular attention to the edges.



theory I could use the viewfinder to move the magnified area. But as I use my left eye to compose, the joystick falls too close to my nose, so I use the LCD monitor.

Using the LCD monitor will help you to fine-tune the focus, too. While AF is perfect for general photography, I always use manual focus for close-up and macro work. The X-T2 has various MF Assist modes, but I usually ignore these and use the Focus Check feature instead. With the camera in manual focus mode and Focus Check turned on, the display will zoom in on the focus area as soon as the focus ring is turned, allowing me to make adjustments. When depth of field is limited to just a few millimetres, accurate focusing is crucial, so explore the options available to you. When I use the X-T2 I usually team it with a Fujinon XF 60mm f/2.4 macro lens. (I'm saving my pennies for the XF 80mm f/2.8 LM OIS WR macro – £1,149 for a lens without an all-metal barrel, seriously?) The 60mm only allows magnifications of up to 0.5x (half life-size) without an extension tube (see kit list), which can sometimes be frustrating; so I often find myself switching to the Canon DSLR and Sigma lens, which allows 1x magnifications (life-size).



Monitor wind speed

When wind speeds rise above 10mph, leaves and flowers tend to leap about. At times like this you can focus on stationary subjects, such as bark, or experiment with creative blur using slow shutter speeds. Alternatively, find ways to keep your subject still – experiment with canes, clips, floristry wire and windbreaks.



Follow the rules

The basic 'rules' of composition, such as directing the eye using lead-in lines, positioning key elements according to the rule of thirds, and KISS (keep it simple, stupid), still apply to close-up photography. Think about what attracted you to a subject in the first place and try to emphasise this.



Think about the negative

The area of the frame that contains the main subject is described as 'positive' space, while the area surrounding it is referred to as 'negative' space. Always ask yourself how these spaces relate to one another, and what happens if one is allowed to dominate the other.

Technique autumn macro

Top spots for autumn macro

New Forest National Park, **Hampshire**

Thanks to the high concentration of ancient trees, the New Forest is one of the most important areas in Britain and Europe for lichens, beetles, bats and fungi. Autumn colours can be seen all over, but Rhinefield Ornamental Drive, Bolderwood and Eveworth Pond are particularly photogenic. Visit www.newforestnpa.gov.uk



Take a mushroom ID guide for identification

Westonbirt National Arboretum, Gloucestershire

In the 1820s Robert Holford, a landowner and keen gardener, began planting trees at his country retreat. His desire to create the best arboretum in England was shared by his son, and the family was soon hosting 'colour picnics' beneath the Japanese maples in autumn. Follow the Silk Wood Trail to view the spectacle from the treetop walkway. Visit www.forestry.gov.uk/westonbirt

Dawyck Botanic Garden, Royal **Botanic Garden Edinburgh**

Home to one of Scotland's finest tree collections, Dawyck Botanic Garden houses specimens dating to 1680. During autumn the maples, rowans, beech spindle trees and the wonderfully named candyfloss tree form a rich tapestry of reds, golds and browns. Visit www.rbge.org.uk/visit/dawyckbotanic-garden

Wye Valley and the Forest of Dean

The Wye Valley supports a wide range of habitats including limestone cliffs, heathland and dense native woodland. During autumn a trip to the Forest of Dean is a must, with stunning views across the River Wye from Symonds Yat Rock.

Visit www.wyedeantourism.co.uk

Grizedale Forest, Cumbria

In 2017 the Lake District was awarded World Heritage status. Grizedale Forest lies at its heart, sitting between the lakes of Coniston and Windermere. Take the Tarn Trail climbing eastwards out of the valley to reach the only natural tarn in the forest. Visit www.forestry.gov.uk/grizedale



With so much colour around during autumn it's easy to forget that black & white (or in this case, sepia) can also be effective Nikon 1 J1, 10-30mm lens, 1/60sec at f/4, ISO 320, tripod

Inexpensive alternatives to lenses

If you're just starting out with close-up photography, and you're not sure if you want to invest in a macro lens, there are some inexpensive alternatives in the form of extension tubes, close-up attachment lenses, bellows and reversing rings. Extension tubes fit between the lens and the camera body and work by increasing the distance between the focal plane (sensor) and the rear of the lens, reducing the minimum focusing distance. Close-up attachment lenses (or diopters) screw to the front of the lens and also reduce the minimum focusing distance. Bellows fit between the lens and the camera, and

work in much the same way as extension tubes, but with greater flexibility. Finally, reversing rings enable you to mount a lens on the camera back-to-front. As a result of being reversed, the lens will focus much closer to the subject. All of these alternatives have their downsides, so make sure that you are aware of the negatives before you splash out.

Regardless of the technology you use, the best way to improve your close-up and macro photography is to slow down. The more you look, the more you will see. Autumn is a time for introspection, reflection and renewal, so lie down on the leaves and drink it all in.

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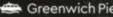
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Go with the

With her impressionistic photography, Canadian photographer **Barbara Cole** has created an extraordinary body of work. She talks to **Amy Davies**

ooking at Barbara Cole's fantastic underwater work, you'd be forgiven for assuming you'd stumbled across a painter's back catalogue. Look a little bit closer though and you'll begin to see that these sublimely ethereal pictures are indeed photographs. AP fortuitously bumped into Cole at this year's Photo London, where her work was one of the most compelling and standout displays of the exhibition.

Cole spent several years working as a fashion editor before turning her hand to photography. Perhaps surprisingly for someone with a journalistic background, she was never interested in photography's ability to convey realism, and was The images on this spread come from Cole's 2016 series 'Falling Through Time'. The backgrounds are shots taken with a Polaroid SX-70 and show various **English gardens** during the 1990s. The models were shot recently in Cole's underwater studio in Toronto, using a digital camera.

Right: Egyptian Avenue Below: Palace Gardens almost immediately drawn to the idea of creating abstracts.

Cole was once a passionate advocate of Polaroid, for which she had a particular fondness due to the way it was able to create abstracts. Speaking to us from her home in Toronto, Cole says, 'I needed to make pictures look painterly, and Polaroid film, in a nutshell, gave me that opportunity.

'With Time-Zero film, the surface was plastic and the back was paper. You could peel back the surface and in between was a gel. If you carefully pushed that around, you could get that white gel to come through the plastic layer and it was like oil paint. I lived for that film, and it created my interest in photography big time.'

Finding an underwater world

Sadly, Cole's love affair with Polaroid was not destined to last as the company famously went bankrupt and all film production stopped. This twist of fate eventually led Cole to what has turned out to be an even more enduring relationship – shooting underwater. 'I knew it was coming, but I just thought my life had ended. By that point I'd been working exclusively with Polaroid for 10 or 15 years, and suddenly I was supposed to stop? I started looking for another way to create abstract pictures and that ended up being in the water.

'I had an idea for what I would do.
I had rented a camera and a flash,
and had very basic information on
how to use it. After a couple of years
experimenting with digital
solutions [to recreate the look





CREATIVE PHOTOGRAPHY





of Polaroid film], I just moved on; and it worked. And I've been doing this now for 20 years.'

Swimming with ideas

For that first underwater shoot, Cole used a Nikonos camera, but it wasn't long before she made the switch to using a digital camera, especially as she was also undertaking commercial work at the time. Describing her camera as a 'Canon whatever,' she is extremely keen to emphasise how 'non-techy' she is, and that it doesn't matter what the camera is. 'I had my first show at the Jane Corkin Gallery in Toronto in 1986. My mother came to the show and said to the owner of the gallery "My daughter's camera takes such good pictures..."; a frustrating tale which will surely be familiar to many of us.

Cole's underwater work begins life in the pool, right from the idea's conception. 'A typical shoot begins in my head. I am extremely fortunate to have a pool in my back yard. I swim about six times a week. I always joke and say that's my office, because that's where my ideas come from. I heard that Steven Spielberg got all his ideas while he was driving on the LA freeway, and if that's true, it's kind of like that. I'm just swimming, thinking about what I have to do, and suddenly I'm somewhere else and the ideas come like a brainstorm out of nowhere.'

Those ideas are often tempered with a healthy dose of realism by her assistant, with whom Cole has been working for 15 years. 'He's really nice, and he's so helpful, but he always says "No!" But then I'll wait, because he'll come back and go, "So I was thinking..." Once I hear that hopefulness in his voice, I know we're good.'

What it takes to make a picture

With her work being very cyclical by nature, Cole typically spends winter retouching her previous show and planning for a new one. Casting and bookings begin in April, while shoots take place in summer. 'By the end of August, I feel I've worked hard and I've done really amazing stuff, that I'm a genius. Then in September, I feel like a fraud, I become petrified that there's nothing there. I spend all of October worrying, then I have to slap myself

'Suddenly I'm somewhere else and the ideas come like a brainstorm'



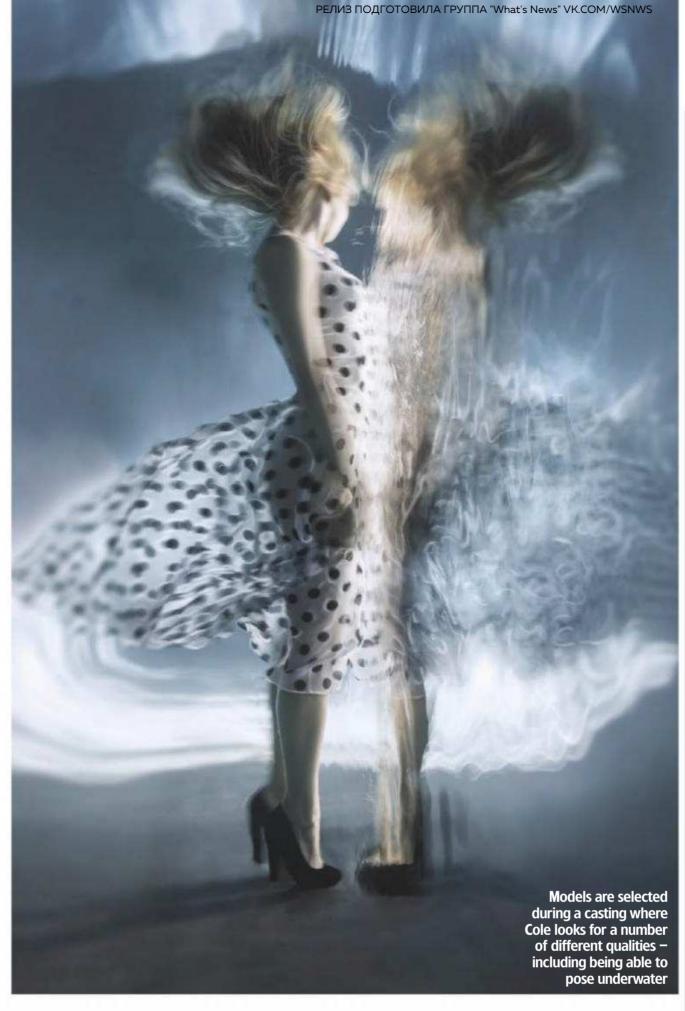
Based in Toronto. Canada, Barbara Cole describes herself as a painter but employing traditional photographic tools'. She was with the Toronto Sun for a decade, then, during a sabbatical from the paper in 1985, she began to put together her first photographic exhibition for Toronto's Jane Corkin Gallery. Her artwork is extensively collected by both public and private institutions, and has been exhibited worldwide.

around, and by November I'm finally putting the pictures together.'

All of the costumes the models wear for a shoot are especially created in partnership with the fashion designer Lucian Matis. Now one of Canada's most prominent designers, his relationship with Cole began when he was just a student.

Directing underwater is about as challenging as you might imagine it to be, especially given that a standard shoot lasts all day, for two full days. But, says Cole, it becomes easier as the shoot progresses. 'In the beginning, the model, she won't say it, but she's so concerned about whether she can sink or not. It's a very hard thing to do. We start by holding hands, and we sink together – giving her some tools, like a weight belt, or goggles, so she can see me and what I'm doing.

'I find it very helpful to show them what I shot, so they get a sense of what they're doing, how it's working and the way I like it. It's not like being in a studio. You're dealing



with fragile young girls who want to please you – so you can say, "When you come down, please come to the right, and then let your arms go, or let your legs go out", but when she's got to contend with her hair, her dress, breathing – in the end whatever she does is perfect, and I just have to work around her.'

Since Cole is self-funded, she tends to pick models who don't have a lot of experience, but is careful to ensure that they're well cared for. 'The models will not tell me that their eyes are stinging, or that they're hungry, or that they're cold. They're afraid that I'll say something to their agent and they'll never work. I anticipate that; I ask my intern, any time they're not being used, get them a towel, make

them a hot chocolate, let them take a shower. That way, they get a sense that even though I'm 150, they can do what they need to do and not be afraid of me.'

Being underwater herself is very important for Cole. She says, 'People always say, "I bet she shoots outside a water tank". I don't, because I need to have the same experience – more or less – as the model, or you won't get the same results. If I'm wearing my jeans and a T-shirt and my eyes aren't stinging, how many times do you think she's going to swim when she's not feeling good?'

Despite capturing 'tons' from most shoots, Cole will usually be left with just four or five keepers. 'With digital, we're spoiled. With film, I was very careful with what I shot,



You can see more of Barbara Cole's work in her latest book, which is self-titled and available to buy now. For more information, head to barbaracole.com.



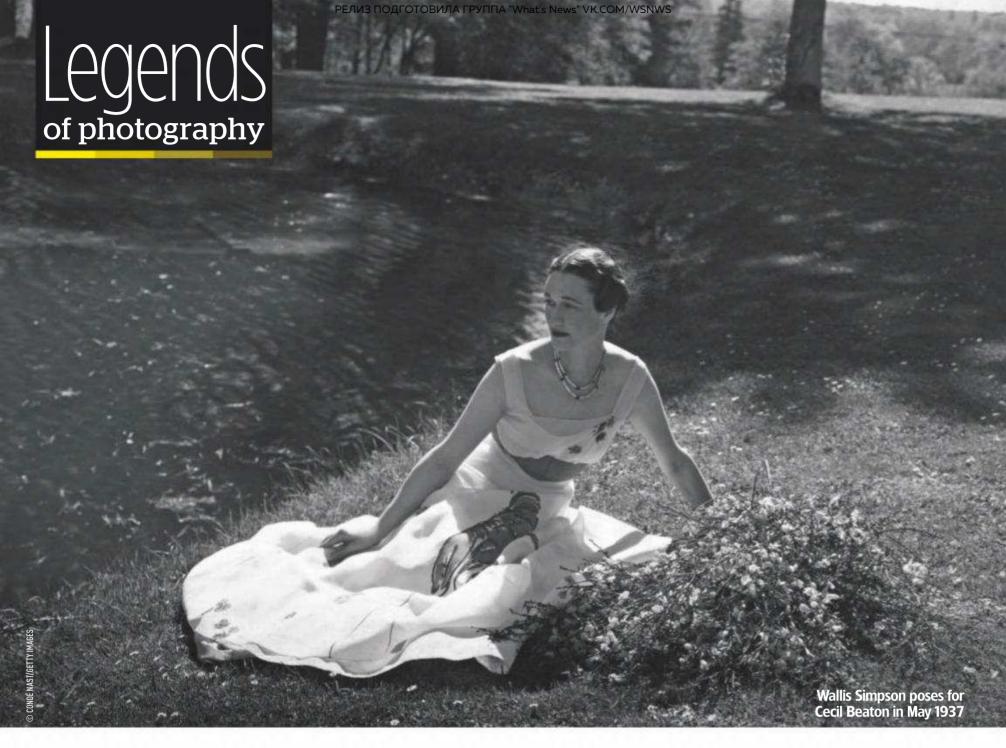
A typical two-day shooting session leaves Cole with just four or five 'keepers'

because the processing, the contact sheets, making the prints and the retouching, it was all hugely expensive. It's a different animal now. I think it's fantastic in terms of people starting out because they see their mistakes immediately. But you shoot so quickly that maybe you don't retain as much knowledge.'

Trying new things

More recently, keen to foster what she calls a 'one, two punch' approach, Cole has taken a step back to analogue photography for an entirely separate project. She explains, 'For the past seven years, I've learned the process of making film on glass and using an 8x10 camera, to create ambrotypes and tintypes. I've made every mistake possible, but I have finally found my voice with that and I now work on both series simultaneously.' Lately, she has also combined some of her old Polaroid shots, using them as backgrounds for models in the foreground, shot underwater.

You might think Cole would be further tempted to go back to her first love with the reinvention of Polaroid, first via the Impossible Project and more lately with Polaroid Originals. But it's not for her. 'I don't go back. It was such a beautiful experience that I don't want to ruin it. Anyway, the colours aren't quite right, and they also don't have the emulsion that moves around - I don't think so anyway. I was tempted for a moment, and then no, I just thought it would be re-doing something - I think that you have to move forward.'





Cecil Beaton

Beaton's influence on contemporary photography is assured and more than justified, as **Oliver Atwell** discovers

hroughout his career, Cecil Beaton photographed some of the most notable figures in 20th-century culture. His extravagant and masterful portraiture work was groundbreaking, and to this day its influence is still felt in the pages of fashion photography publications such as Vogue, a magazine with which he had a long and fruitful relationship. Of all the images that Beaton took - and there are many – perhaps his most famous concern the royal family, all of which were produced for

official publication. His image of Queen Elizabeth II on her coronation day, for example, is a truly beautiful image and one typical of Beaton's fearless dedication to producing portraits with true impact. However, it stands in contrast to the image we see here.

Wallis Simpson was an individual who in the 1930s became the centre of a firestorm that threw the British government into a constitutional crisis. In 1936, King Edward VIII expressed his desire to marry Simpson, an American socialite and divorcee. The marriage was

an affront to the religious and moral makeup of the Commonwealth and, due to the opposition, Edward relinquished the British throne. Nonetheless, he was soon made the Duke of Windsor, resulting in Simpson being afforded the title Duchess of Windsor following the pair's eventual marriage. As a result of this, Simpson is seen as a controversial figure in British history, not least due to her and Edward's meeting with Adolf Hitler and their suspect Nazi leanings. It was inevitable, then, that she would find herself the subject of Cecil Beaton's lens.

There's a degree of confrontation and subversion at work in the image. Take a look at that Elsa Schiaparelli dress and you'll note the hand-painted lobster on the front. That image was by none other than Spanish surrealist Salvador Dali, who often used lobsters in his work to depict primal sexuality. It's a perfect contrast to the idyllic surroundings, the soft natural light and Simpson's relaxed, reclining pose. Beaton seems to have deliberately posed her in such a way that seems to fit the mould of a relaxed and dreamy feminine archetype, one palatable to the British public. But that lobster suggests there is something beneath the surface that cannot be repressed; something deep and real, instinctual and sexual. It's probably not too speculative to suggest that Beaton, as a bisexual in the 1930s, related to this on a deeply personal level.

Beaton enjoyed a long and acclaimed career but in the late 1970s suffered a stroke, which severely limited his ability to take photographs. As his finances began to decline, he was forced to make a deal with Sotheby's to auction his work, excluding the images of the royal family and the 50-years-worth of work he produced for Vogue. In January 1980, just four days after his 76th birthday, he died. However, he left behind a trailblazing archive of work that marked him as perhaps one of the most influential photographers who ever lived.

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LETTER OF THE WEEK

Why so few APOY entries?

Having entered most rounds of this year's APOY I have to say that the standard of entries for each round has been extremely high. In the 'World in Motion' round my entry achieved a position of 236, which I am more than happy with. But what did surprise me was the lack of entries – only 364 images were submitted



from 255 photographers. Is this not a disappointment?

Until this year I hadn't heard of Photocrowd; I only joined in order to enter APOY. I use the results to gauge my standard against theirs, which allows me to work on how I can improve my photography skills. I have since entered a good number of Photocrowd competitions with varying degrees of success, and

have also joined in rating images, which is great fun.

Within these Photocrowd competitions there are often over 1,000 images entered, which makes me wonder why the number is so low for APOY? I don't understand why a premium contest like APOY (with a sponsor, top-quality prizes, and the top 30 photos of each round printed in the magazine) only gets 364 entries while a Photocrowd community competition (without any real prize other than pride) entitled 'Pink – your best image showcasing anything Pink' gets over 1,000 entries. AP has an ABC accredited circulation of just over 14,500 for 2017. So my question is to the AP readers who buy AP but didn't enter the last round of APOY 2018, what is stopping you from entering APOY? **Martin Norden**

This is our second year working with Photocrowd. In the first year everyone was given a free entry. This year, to give our readers an advantage and to encourage more Photocrowd members to buy AP, we changed it so you only get a free entry if you use the code printed in the magazine. This has inevitably resulted in a big drop in the number of entries to APOY from Photocrowd members, compared with their free ones, but a higher proportion of APOY entries are now from AP readers. I'd love to hear the answer to your question from those readers who didn't enter APOY this year, and perhaps encourage more of them to do so next year — Nigel Atherton, Editor



Mean streets?

This is in regard to the article 'AP reader embroiled in street photo row' (7Days, AP 6 October). To me, the described confrontation could have been handled differently, given that the response Rob gave to the brother, according to the article, leapt straight into legalities. This misses the point: if someone is unhappy to be photographed, whether legally or otherwise, I suggest that their wishes for the photos to be deleted should be respected. I'd further suggest that the key to getting people on board in this type of situation is preparation. Was Rob carrying details of the competition? Did he have cards with his details on, just in case? Did he explain why he took the photos? A bit of courtesy can go a long way. I don't know Rob so I can only comment on the information presented.

Phil Ensor

In response to your news item 'AP reader embroiled in street photo row' (7Days, AP 6 October) concerning the unfortunate experience of Rob Kuhner, I suppose many of us who indulge in photography on the street might have some sympathy. However, as a street-shooter myself, I must say that my response when people whom I have photographed express concern is to apologise and delete the image(s) if they so desire. This is regardless of my 'rights', though I would defend these in the case of shooting images of other, non-personal, subjects when I was entitled to do by standing in a public place. I just wonder why he didn't seek permission for his photos of the three women in the first place? Surely this is a common courtesy and one by which we can forestall any aggravation.

Tony Cole

The whole point of candid documentary photography is to capture real life as it is happening. The moment you ask permission first you're no longer an observer of life – you're taking a posed portrait. Which is fine but it's a different genre. Of course if you do shoot candids, and you're spotted and challenged, there are different ways to respond, and without being there it isn't possible to know if the situation could have

been diffused had Rob Kuhner acted differently. What is clear, however, is that there are still some people, often in positions of authority, who labour under the false belief that it is illegal to photograph people in the street – Nigel Atherton, Editor

OneDrive to rule them all

Another alternative to paying Adobe £120 per year for 1TB of cloud is to pay Microsoft £60 per year for Office 365; that way you get 1TB of OneDrive cloud storage which can be easily accessed from Lightroom CC, and you get up-to-date versions of all the Office applications. I've tried various different clouds and OneDrive is the best I've experienced. It works well for me across three platforms: a Windows 10 PC, an iPad Pro and an Android phone. I'm impressed with the processing capacity I now have on my phone and iPad.

Bob Sapey

Memories of Lubitel

I am puzzled. I have been reading AP since 1963, and I just finished reading the AP 29 September issue and the article From Russia with Lomo love about the Lubitel 66. I used to sell Lubitels and Cosmics (a plastic 35mm Russian camera) in the '70s when I worked in a camera store. They were introduced as a cheap alternative to the quality cameras available at the time and sold, not on their capabilities but purely on their low price, just like the Brownie Kodaks and Halinas. This was great, as it allowed a lot of people to try out photography and if they liked it, to move on to a 'proper' camera.

Now I see this latest iteration of the Lubitel, with a price tag of £289, being sold as an artistic tool, with praise for its 'characteristic rainbow lens flare' and 'vignetting effect'. Why would anyone buy this camera when they could chose, for the same price, any number of used quality cameras, from the likes of Rollei, Minolta, Yashica, etc.? If you really want lens flare and vignetting, you could do worse than choose something like the 1939 Ikoflex 111 that you feature in the same issue (*Tech Talk*) – at least you'd know you would be operating an 80-year-old instrument of quality. Ok, it's reasonably rare, so may not be easy to obtain but I'd suggest that anyone

contemplating buying one of these new Lubitels to go along to Mr Cad in London instead and have a look at all the many used quality alternatives they have on offer. They may even have a used Lubitel – who knows!

Ralph Allen

I read Rod Edwards' field test (From Russia with Lomo love, AP 29 September) with interest, and a degree of incredulity, as a former Lubitel owner. I bought mine at a tourist shop when we docked in Leningrad (as it was then) when I was on a school cruise. I paid in a mix of currencies - all the small change I'd acquired in previous ports, and amounting to around £2. The only rainbow I got was the one below, over the M4 in Berkshire, early in 1971.

I had a year or two of fun, but also frustration because of the difficulty of achieving focus. Nonetheless the results were half-decent and guite outstanding.

I dare say I'd still have the camera if a quite-short drop had not shattered the camera back: the plastic was incredibly brittle.

I'd therefore urge caution for any potential Lubitel buyers. Unless the materials have been upgraded considerably, the Lubitel needs cosseting for all the other design tweaks. If you want a camera to experiment with, look at second-hand dealers and eBay, where you can buy a second-hand Rolleicord for similar money, or a

Yashica-Mat for less, and have a collectable camera that is useable.

However, if it is the adventure of using something that is imperfect that attracts you, the older cameras will have less appeal – and as digital makes all aspects of picture-making ever more controllable, that may be something to be treasured.

John Duder

Pick up a Penguin

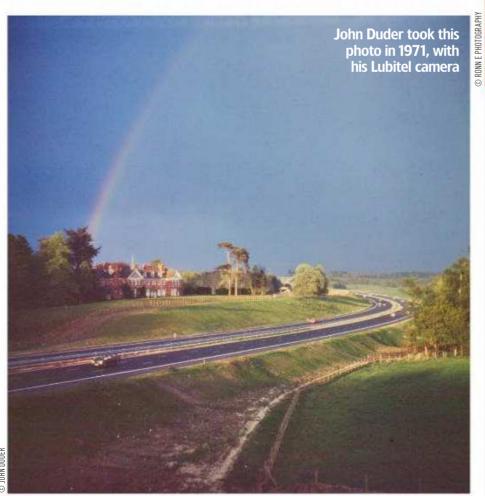
I refer to John Cookson's letter in Inbox, AP 8 September. I'm afraid I don't have any penguins with whom I am on speaking terms but I do hope you find one willing to write an article on wildlife photography ethics. Thank you for your excellent magazine.

Roy Baker

Eves left

Regarding your discussions about people who use their left eye for viewing, I have always used my left eye going back to my film days with Zenith, Practika and Pentax. Throughout this time I had to endure a bent nose against the back of the camera. It was only when I switched to a Canon EOS system that I found the answer: the eyepiece extender EP-EX15. I use one of these on my Canon EOS 50D and EOS 5D Mark IV. I also use an eye cup to keep out any excess light. I don't know if other camera manufacturers offer anything similar.

Tony Mead





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Round Eight Travellers' Tales

Every location has its own unique feel. If you are looking for inspiration visit the oldest part of a location, and then the newest part. Or climb to the highest point and look down on your temporary home. Get up early and visit a local market, or stay out late and shoot lights reflected in water. Talk to people, but try not to 'steal' a shot.

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LOCATION GUIDE

Dartmoor

From vast open expanses of wasteland to ancient forests, Claire Gillo reveals why you should take a trip to Dartmoor





Waterproofs & hiking boots

It can be bleak and freezing so wear sensible clothing and sturdy hiking boots that can withstand those bogs. Full head-to-toe waterproofs will also be a blessing when the bad weather hits.



Lens choice

There is no doubt that a 16-35mm will get used a lot in this wild location, but also pack a telephoto lens such as a 70-200mm – you'll be glad of it if you want to shoot some stretching panoramas.

Tripod

You'll have to compromise between a lightweight model for carrying and a heavier one for stability as the winds can whip round in the open spaces. Secure your tripod by hanging your camera bag from the centre column.



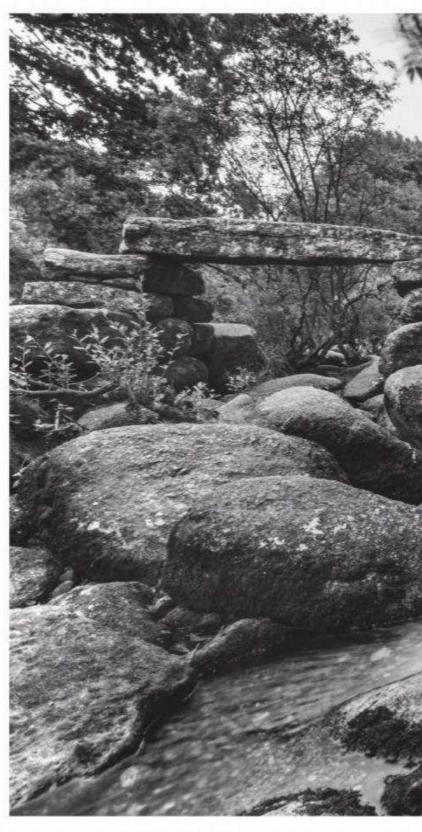
DARTMOOR is a wild, adventurous and unforgiving landscape for the outdoor photographer. To start your tour, take a walk down to Nun's Cross Farm, about 2½ miles south east of Princetown. This old, abandoned building sits conveniently between two identical trees. There's also an old granite cross that stands to the left of the farm. Both of these offer plenty of pleasing compositions for the photographer.

If you're after an iconic Dartmoor tor the biggest and most well known is Haytor; however drive round a bit further and you'll find Hound Tor. This towering stack of granite rocks takes your breath away and by hiking to the top you can frame an attractive composition with Haytor in the background. Saddle Tor has many hidden gems, from bluebells in May to the west of the tor at Emsworthy, to scattered hawthorn trees in the summer, including one very wonky, wind-blown tree that has become a staple shot for photographers.

There are plenty of water sources on Dartmoor. Dartmeet is a beautiful part of the river and by clambering across the boulders near the bridge you can create a picture-perfect postcard image. There's also a handy car park and cafe right next to the river.

For moss-covered trees then Wistman's Wood is a must-see, and is about a 20-minute walk from the car park. It is best to visit in atmospheric conditions, such as a misty day, for impressive results.

Finally, remember to keep an eye out for all types of wildlife. Dartmoor is especially well known for its wild ponies that roam the land freely.





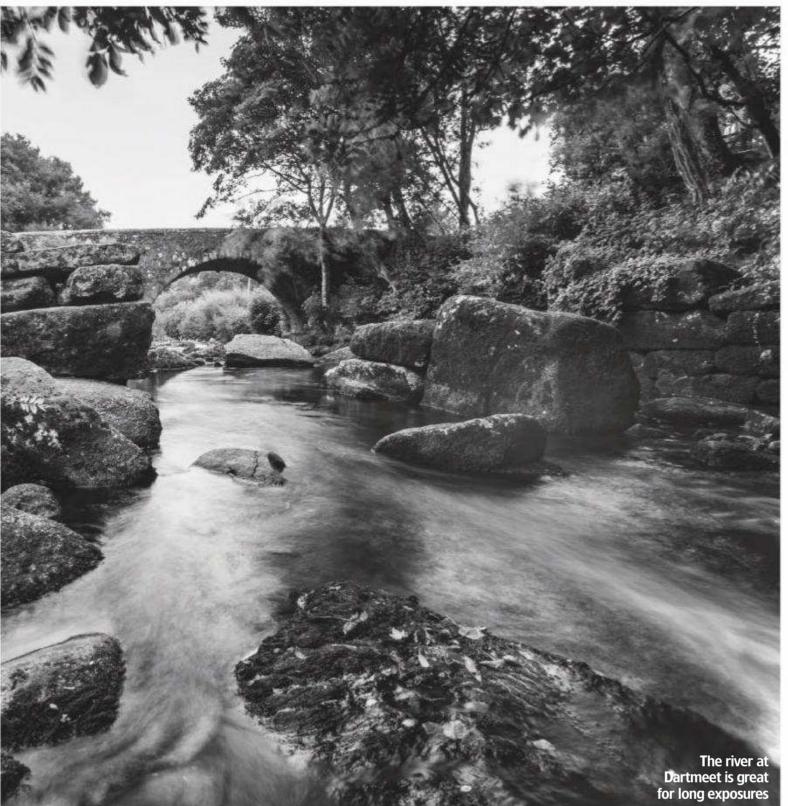
Above: Including the gate and stone wall helps for a balanced composition

Right: Make use of the two trees and granite cross to frame the building



Claire Gillo

Claire is a photographer and writer based in South West England. She has worked for a number of photography magazines over the past decade. www.facebook.com/Clairegillophotography or on Instagram @clairegillophotography



Shooting advice

When to go Dartmoor can be

Dartmoor can be photographed 24/7, 365 days of the year! Each season has different things to offer, so you can see snow-capped tors in the winter and blooming bluebells and idyllic hawthorn trees in the summer.

Food and lodging

There are plenty of local pubs, restaurants, and cafes dotted around Dartmoor. For a traditional cream tea to satisfy the stomach take a trip to Badgers Holt and enjoy its beautiful garden setting at Dartmeet.

It is possible to wild camp at Dartmoor for one or two nights if your location is well away from any roads or settlements and you abide by the no-impact rule. However, camping isn't for everyone, and if comfort is what you're after then Prince Hall Hotel is worth a look, or for those on a budget there's the YHA Dartmoor in the heart of the landscape. For more information on food and lodging, refer to www.visitdartmoor.co.uk.

Word of warning

The weather at Dartmoor can change in a matter of seconds, so if you're going off the beaten track then make sure you are fully prepared with maps, clothing and supplies. The landscape can be extremely unforgiving and unpredictable. Make sure you tell others of your whereabouts and plans. Take care when driving, as you should keep an eye out for sheep and cows that may cross your path. Also it's a great opportunity to photograph any wildlife that might appear, such as the area's wild ponies.

Reader Portfolio

Spotlight on readers' excellent images and how they captured them



Ade Ward, Cardiff



Ade's photographic journey began after a bizarre turn of events. He was out walking along the coast one day when he tripped over and tumbled down onto a pebble beach. The view he saw from his slumped position inspired him.

Rather than getting back up, he took out his phone and captured the scene in front of him. Since then he has travelled further afield to capture more stunning sights. With a passion for landscapes, seascapes and wildlife, Ade enjoys exploring, and capturing images that have a story to tell.

Heron feeding

Ade shot this from a hide, enabling him to sit and wait for the perfect moment to capture the heron hunting for its food. Nikon D500, 150-600mm, 1/2000sec at f/6.3, ISO 800, monopod

Posing fox

2 Combining
elements of the
golden evening light
and luck, Ade
captured this
beautiful fox portrait.
Nikon D7200,
150-600mm,
1/320sec at f/11,
ISO 640, monopod





Rogue rabbit 4 Ade was in a hide at the Forest Farm Nature Reserve on the look-out for a heron or kingfisher, when this little chap appeared. The warm light and surrounding grass proved great conditions for capturing a portrait of this inquisitive rabbit. Nikon 7200, 150-600mm, 1/1000sec at f/10, ISO 800, monopod



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Wild horses

3 As Ade says, he could not have asked for better light. He has done well to balance his exposure as the sun was setting, retaining the colours in the sky as well as the foreground detail.

Nikon D7200,

18-200mm,

1/1000sec at f/4.5,

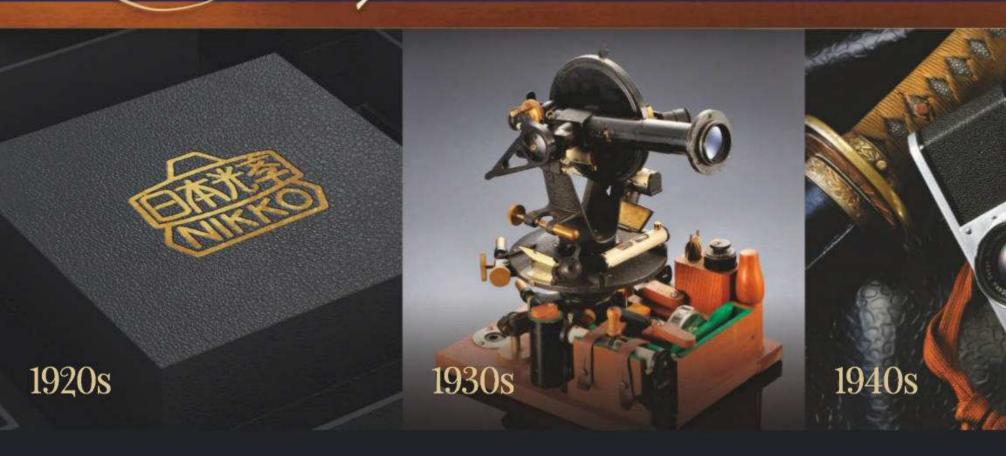
ISO 400, monopod



Heron hunting **5** Ade dealt well with the bright, harsh sunlight by waiting patiently for the heron to move into a more shaded area. He has cropped in tight to avoid the bright highlights in the reeds bouncing off the water and has framed the heron nicely off-centre. Nikon D500, 150-600mm, 1/200sec at f/8, ISO 1000, monopod







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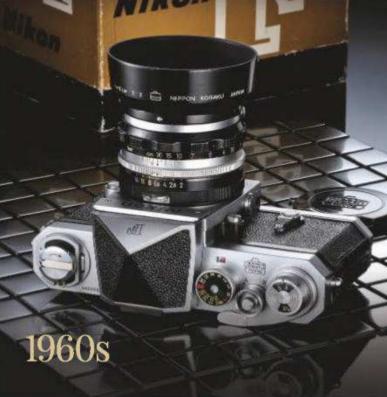


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THE MAKING...







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Technique HIGH SPEED SYNC



The key to success is having your lights positioned as close to your subject as possible

I he pov Of HSS

Rotolight's High Speed Sync LED flash opens the door to faster shutter speeds and wider outdoor apertures. James Paterson puts it to the test

sn't it great when a piece of kit excels at more than one task? For example, take a macro lens – ideal not just for close-ups, but also useful as a portrait lens. How about a trusty 5-in-1 reflector? Invaluable for bouncing light, flagging it, diffusing it and even making for a handy dry spot when perching on wet ground. The point is, when your gear can multitask, it lightens the load on both your wallet and your kit bag.

With lighting kit we don't tend to expect much in the way of multitasking - most just offer an on/off switch and an output control. But Rotolight's range of LEDs buck the trend. Not only do they give you constant LED light in combination with colour temperature controls, they also offer an innovative flash mode that increases the max output of the light. With the larger Rotolight AEOS and Anova PRO 2 LEDs, the flash mode doubles the

max output. With the smaller Rotolight NEO 2, switching to flash gives you 500% more light when plugged into the mains, and 250% when using batteries.

As well as the increase in output, the Rotolight flash mode is also compatible with High Speed Sync photography. Which means you can use flash with higher shutter speeds than the camera's max flash sync speed (usually around 1/200-1/250sec). This brings two main benefits – first of all, it can be helpful for freezing motion in moments of action, as with the wet dog here. Shot at 1/2000sec, I was able to capture the action with all the clarity of flash.

Typically a shot like this would be done in a dark studio, using the flash duration to freeze the motion rather than the shutter speed. But the flexibility of HSS flash means we can shoot outdoors which saves on the clean up! To do so effectively, we need to underexpose the

ambient light so that it plays only a minor role in our overall exposure, then use the Rotolight NEO 2 to overpower the daylight. Thanks to the increased output when in flash mode, the Rotolights are capable of doing so. Our exposure here is 1/2000sec, f/4 at ISO 800. Shot in the shade and using the dark side of a reflector as a backdrop, this is enough to underexpose the ambient light so we can

pick out the subject with the HSS flash.

Shoot with wider apertures

The other main benefit of HSS is the potential to use wider apertures when shooting outdoors, which allows us to create beautiful blurred backdrops beyond our flash-lit subjects. If a flash doesn't have high speed sync then we're restricted to our camera's max flash sync speed. On most DSLRs this is around 1/250sec. This might sound fairly fast, but in bright outdoor conditions – even when dropping



the ISO right down to 100 or less – it may prevent us from reaching the widest apertures, simply because there's too much light entering the camera. For lovely smooth background bokeh we ideally want to open our aperture to f/2.8 or even f/1.4, but with our shutter speed restricted to 1/250sec we might only be able to open up to f/4. Often this is the difference between beautiful creamy bokeh and the beginnings of cluttered background detail. With HSS flash we're able to use a faster shutter speed and therefore open up to any aperture we choose.

Of course, another way to get around this problem would be to use a neutral density filter to cut out some of the light entering the lens, which – as with increasing the shutter speed – will allow for the use of a wider aperture. But using ND filters has its disadvantages. First there are the practicalities of carrying filters for all your lenses and the time it

takes to fit them; then there's the possibility of unwanted colour shifts, potential loss of sharpness and the added difficulty of composing through a darkened viewfinder.

No recycle times

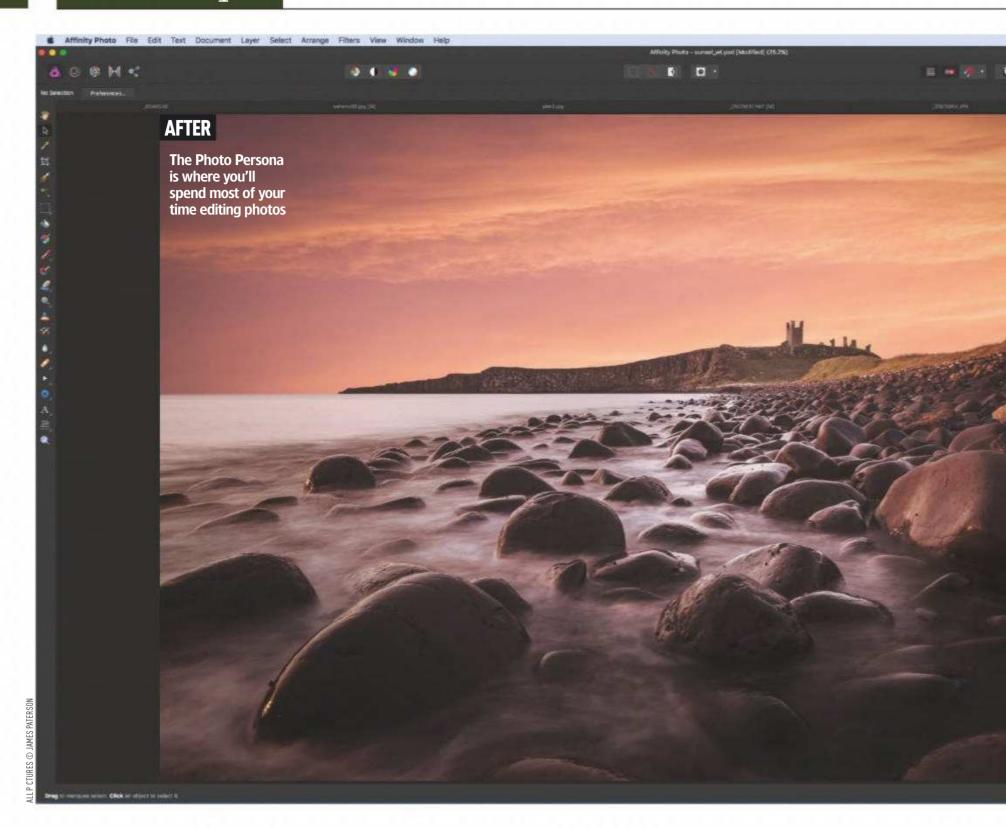
When using the Rotolights for flash photography one of the things that really stands out is the complete lack of recycle time. This means we can set the camera to high speed drive mode and fire off multiple shots in rapid succession. This came in handy on our shoot here, as our furry friend Bella the Spaniel proved to be a tricky subject, preferring to run off to the back of the garden before shaking off the water rather than obediently doing so in the spot we'd lit. Thankfully, because I could rattle off seven flash-lit frames per second I was able to capture the action on the one occasion when she did shake off in the right spot.

HSS triggers

TO MAKE use of the HSS flash feature we need to use a compatible HSS trigger. The Elinchrom Skyport trigger can talk to the inbuilt HSS receivers within the NEO 2, AEOS and Anova PRO 2 lights. Rotolight products work with all compatible Elinchrom Skyport transmitters for Canon, Nikon, Olympus/Panasonic, Sony and now Fujifilm cameras. The Skyport not only lets us trigger the flash and control the output, but also allows us to change the colour temperature. For shooting video, the Skyport can be used to initiate Rotolight's range of video lighting effects that lets you simulate things like firelight or gun shot flashes.



Technique Affinity Photo Masterclass

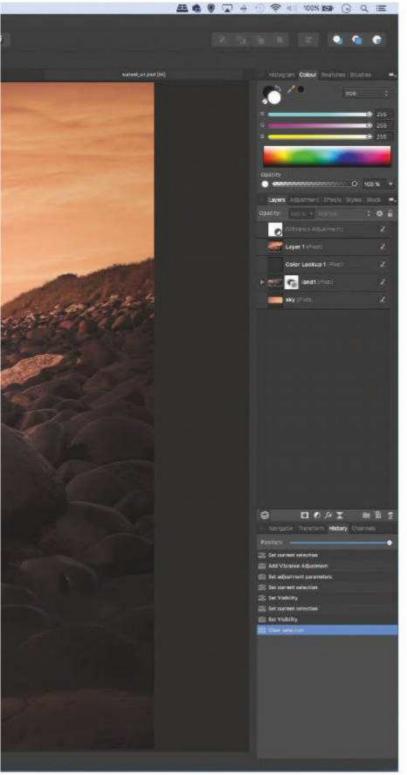




A key feature of Affinity is Personas; each persona has a different workspace with an array of tools

Getting started with Affinity Photo

Upon first opening an image into Affinity Photo the range of tools might seem daunting. So it helps to spend a little time finding your way around. One of the key features of the interface is Personas. Accessed via five buttons at the top left of the interface, Personas are Affinity Photo's approach to different workspaces, each with their own array of tools and commands. The tools usually appear in a toolbar on the left, with additional controls in the panels on the right. First is the Photo Persona (pictured), which is where you'll spend most of your time editing photos. Next is the Liquify Persona. Here you can push, pull, twirl, bloat and reshape your images. Following Liquify is the Develop Persona, which is Affinity Photo's answer to raw editing. After this comes the Tone Mapping Persona. This can be used to tone HDR images, although you can also use it to give normal images the HDR look. Finally there's the Export Persona, which offers a range of export options that will be especially useful to designers and web developers.



Making the switch

If you're familiar with

Photoshop then you can be

up and running with Affinity Photo

Below: If you're a Photoshop user, it won't take long to adjust to Affinity Photo's interface

9

James Paterson

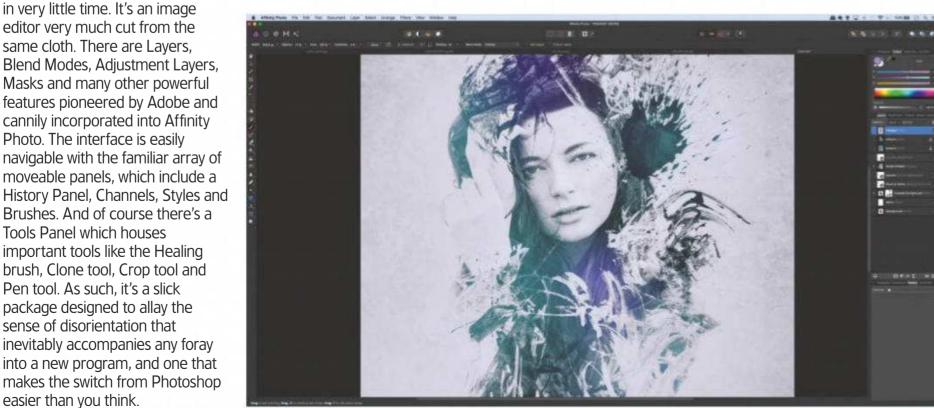
James is as skilled a photo editor as he is a photographer. His work has appeared in countless magazines and books, and in 2014, he was appointed editor of *Practical Photoshop* magazine. His subjects range from portraits to landscapes, architecture and underwater scenes. Visit **www.patersonphotos.com**

Affordable Affinity

At a fraction of the cost, can Serif's image editor really rival Photoshop? **James Paterson** explores some of the key features

hotoshop has been the undisputed king of image editors for the best part of 25 years, but since the introduction of the subscription-based model in 2013, many photographers - put off by the thought of perpetual monthly payments for the rest of their image-editing lives – have been looking elsewhere. One popular option that offers a great deal of bang for the buck is Serif's Affinity Photo. Costing the equivalent of just five months of Adobe's Photography Plan subscription, Affinity Photo has been making headway with photographers for a few years now, and its development has progressed rapidly.

But cost counts for nothing unless it delivers. Affinity Photo gives you an impressive range of image-editing controls. It can't compare with Photoshop in terms of its feature set, but there's an argument that many photographers - particularly casual users - don't necessarily need the depth of tools on offer in Photoshop, which encompass all kinds of workflows, from 3D rendering to video editing. So if you're looking for a powerful photo editor that is also kind on the wallet, Affinity Photo might be the right choice for you. Over these pages we'll take time to explore many of its key features and benefits.



Technique Affinity Photo Masterclass



Raw editing

When you open a raw file into Affinity Photo it will automatically appear in the Develop Persona. This is the app's raw processor and, unlike a separate plug-in such as Photoshop's Camera Raw, it's included in the main interface. You'll find useful tonal sliders to the right of the screen, plus a selective brush and gradient tool that can be set to create linear, radial or elliptical adjustments. In the toolbar on the left there are essential tools for setting the white balance (use it to click on a neutral point in the image) plus cropping and blemish removal tools. Once you're finished editing your raw file you need to click the Develop button to commit the changes and access the other Personas. It's worth noting that after this you can still go back to the Develop Persona at any point in your workflow to use its tools on your image.



6 PHOTOSHOP-BEATING FEATURES IN AFFINITY PHOTO



1 Live Brush Previews

This feature will impress those of us used to using Photoshop brushes. The Affinity Brush tool cursor has a live preview that shows how it will work before we start painting - including any blend modes or opacity settings (handy for hand-colouring old photos by painting a layer set to the Colour Blend Mode here). It works brilliantly when painting layer masks too.



2 Macros

Macros are recordable operations similar to Photoshop Actions. We open the Macro Panel (View>Studio>Macros) and hit record, then any edits we make are recorded. Unlike Photoshop, we can tweak the settings within the macro steps. The saved macro appears in the Library Panel, ready to be applied to other photos or used for batch-processing.



3 Non-destructive resizing

If you resize a layer to make it smaller then choose to make it larger again, there will be no loss in quality – its highest resolution is always available regardless of its size onscreen. This is akin to converting a layer to a Smart Object in Photoshop, but with Affinity Photo non-destructive resizing is the default.



Creating HDRs

If you enjoy HDR photography, Affinity Photo offers several useful exposuremerging and tone-mapping features. You'll need two or more bracketed exposures for this, shot using a tripod to keep them in alignment. First we merge the exposures together using the 'New HDR Merge' command found under the File menu. Once done, we can take the resulting 32-bit HDR image into the Tone Mapping Persona (accessed via the top left icon) to enhance the tones and detail, giving it the

'HDR look' if we choose to. The Tone Mapping Persona offers a range of presets on the left side that can be used to give your HDR instant looks like 'Dramatic' and 'Cool'. On the right you'll find useful tonal controls such as Tone Compression, that's used to control the extent of dynamic range, and Local Contrast, which enhances details for the crunchy look associated with HDRs. Once done, we can go to Document>Color Format to convert the bit-depth to 8-bit before exporting in our chosen image format.

Layer tools

Layers have long been the cornerstone of editing in Photoshop, and they're also at the heart of many of Affinity Photo's best features. For the uninitiated, Layers can be hard to grasp. It's helpful to think of them as layers or acetate placed on top of one another. The control centre for Layers is the Layers Panel, which offers access to all the most important features.

In Affinity Photo, Layers can be used for all kinds of powerful edits. First and foremost, we can use them to combine images, or

add graphics and text to photos - with each element confined to its own layer and therefore endlessly editable. As well as pixel-based layers that contain images or parts of images, we can also make use of Adjustment Layers. These act as standalone adjustments and affect all the layers below them in the layer stack. We can also employ a range of layer blending tools, from simple opacity settings to layer masks and Blend Modes - we've used the Screen Blend Mode here to create a simple double exposure effect.



4 Mirror Filter

Accessed under Filter>Distort>Mirror, this unique filter is unashamedly great fun. It can result in wonderful symmetrical patterns, allowing you to transform photos into geometric designs in interesting and frequently unexpected ways. We simply set a number of mirrors, tweak the angle and drag the centre point to create the effect.



5 Frequency separation

Frequency separation is essential for high-end retouching, but in Photoshop it takes several steps to set up. By contrast, Affinity Photo offers a dedicated command under the filter menu. It creates a high frequency and low frequency layers, with a handy split-screen view to fine-tune the level of detail. Once applied, we can retouch each layer individually.



6 Blend Ranges

This command is found by clicking the cog icon in the layers panel. It allows us to blend layers based on the luminosity or colour values, letting us merge two photos in seconds. It's much like Photoshop's Blend If command, but it goes one further by offering an intuitive set of curve controls that allow for a finer degree of control. It lets us replace the sky in seconds.







Late 20th- and early 21st-century designs. Left to right: Logitech Fotoman, Casio OV-10 and Sony Mavica MVC-FD75, with Spyc@m 100 in front

igital classics

John Wade rounds up some early digital cameras for users and collectors

arly digital cameras that once cost up to £900 are now available on eBay for less than £20. For users, they provide an inexpensive way to shoot quality digital images. For collectors, they make a cheap way to learn about digitalcamera history. (For info, any dollar-topound exchange rates quoted are approximate for the appropriate years.)

The history

The first digital camera was the brainchild of American scientist and electrical engineer Steven Sasson, who joined American company Eastman Kodak in 1973. A few years earlier, in 1969, the charge coupled device (CCD) had been conceived by physicists Willard Boyle and George E Smith at Bell Labs in America. In 1975, Sasson utilised that technology to build an electronic camera that used a CCD in place of film.

With six circuit boards, 16 nickel cadmium batteries, an analogue/digital converter salvaged from a digital voltmeter, the discarded lens from an old Super 8 movie camera and a portable digital cassette instrumentation **Below: Recording** media of various vintages for digital images - a 3.5in floppy disc, Sony Memory Stick, **Compact Flash card** and SD card





recorder, Sasson strung together the first digital camera. It took 50 milliseconds to capture a monochrome image, but 23 seconds for it to be recorded and stored on magnetic tape. When the tape was placed in a playback device, it took another 30 seconds for the picture to appear on a coupled television. In today's jargon it was a 0.01 megapixel camera. Those who saw it likened its design to a toaster.

It was the dawn of a new era, but Kodak didn't see it that way. After all, the image quality was poor and in black & white. How could it rival colour prints from even 110 snapshot cameras, let alone 35mm? Also, assuming betterquality pictures might eventually be made in colour, there was a real danger that this new technology would rival film and processing – from which Kodak made the lion's share of its profits.

Kodak patented the camera plus other digital discoveries and devices from Sasson. But, for fear of damaging its film and processing sales, the company did not progress the idea of a digital camera at that time.

What was needed was an electronics company with no interest in film to take over the reins. Enter Sony, in 1981, with a camera called the Mavica, short for Magnetic Video Camera. It was a single



Testbench digital cameras

'In the decade that followed, digital cameras came and went in a variety of shapes and sizes'

an f/2.8 lens at one end of the narrow side and a built-in flashgun at the other. Using small spinning discs for storage, it shot 50 pictures, viewed by connecting the camera to a normal television.

In 1988 Fuiifilm showed the Fuiix DS-1P, with a removable memory card to replace the rotating disc systems, although the camera never went on sale. In the same year, the QV-1000C still video camera was the first from Nikon with 0.38 megapixels and a price of more than \$20,000 (£11,000). The 1990 Logitech Fotoman, with its 0.08-megapixel black & white images, found favour for a while with estate agents, despite its \$600 (£360) price. The Apple QuickTake 100, in 1994, was similar in design to the Canon Ion. Although badged by Apple, the first two models were made by Kodak and a third model by Fuji. The Casio QV-10 in 1995 was the first with an LCD screen for previewing and viewing pictures. Sony's Mavica name resurfaced in 1997 with the MVC-FD5, featuring a macro function and 2.5in LCD screen, and MVC-FD7, slightly more sophisticated with a zoom lens; both recorded images on 3.5in floppy computer discs. The Sony MVC-CD500 went one better in 2002 and recorded its images on a CD that slotted into a circular holder on the back of the body. The Spyc@m 100 in 2004 was shaped like a large, chunky pen and shot both still pictures and video clips.

Around this time, for those with exceptionally deep pockets, the first digital SLRs began to appear, although not one was built from scratch as a digital camera. Instead, the early DSLRs were hybrids as Kodak joined forces with Nikon to produce the Kodak DCS range, beginning in 1990. The first was actually a Nikon F3 with a Kodak digital image sensor mounted on the back, linked by a cable to a shoulder pack that contained the batteries and hard disc to record images. Later, the DCS range incorporated the batteries and hard disc into a huge base extension that more than doubled the height of the camera. Prices ranged from \$20,000 to \$35,000 (£12,000-£21,000). Kodak also went on to couple its digital backs and bases to Canon cameras like the EOS-1N film camera which became the EOS-DCS3 digital camera.

The problem with digital cameras adapted from film models was that their sensors were smaller than 35mm film frames. As a result, a 50mm standard lens acted like a medium telephoto, thus cropping the image. In 1996 the Nikon E2 used the subsystem of a Nikon F4 and, with the help of Fuji, adapted it for digital use. At the same time it solved the cropping problem by introducing reduction optics technology where a normal 35mm film frame would sit, recording the full, uncropped image onto the two-thirds inch CCD. This needed a much greater distance than usual between the lens and the sensor, leading to the E2's unusual bulky body.

As the 21st century dawned, and most of the recognised camera makers threw themselves into the digital arena, pixel counts and sensor sensitivity increased, prices fell, LCD screens became the norm on camera backs and rotating discs were replaced by solid-state memory cards to store images. These included memory sticks that comprised thin plastic sheets with embedded chips, then more robust Compact Flash cards and finally the much smaller SD cards commonly used today.

Then came a new breed of enthusiast-focused models with SLR-like designs and extensive manual controls, exemplified by cameras like the Sony Mavica MVC-FD97, Minolta DiMAGE 7 and Fujifilm FinePix S602Z, all launched in 2001 and 2002.

Meanwhile Nikon had already developed and introduced the first digital SLR built from the ground up by a single manufacturer. It was launched in 1999 with a breakthrough price of iust under \$3,000 (£1,880). The camera only had 2.7 megapixels, but it offered 4.5 frames per second shooting and, for its time, fast autofocus. It was called the Nikon D1. In 2001 the D1 was replaced by the D1X and D1H, the former offering a 5.3 effective megapixel sensor and three frames per second continuous shooting, the latter retaining the 2.7-megapixel sensor but upping the continuous shooting capabilities to five frames per second.

And so the template was set for digital SLRs. Just as that first Kodak electronic camera had marked the beginning of the end for film cameras, so these three Nikons signalled the end of the beginning for digital camera design.

The cameras

Digital cameras inherited sophisticated technology from film cameras. You can find the usual exposure modes, autofocus, built-in flash, zoom lenses and more on even the earliest digital models. Unlike film cameras though, most have video and audio functions. Here is a selection worth considering.



LAUNCHED 2000

SENSOR 2MP

RECORDING MEDIUM Compact Flash

POWER Li battery or 4x AA batteries with adapter

PRICE AT LAUNCH £750

GUIDE PRICE NOW £20-£25

Pentax EI-2000

This stylish camera was designed by Pentax in association with Hewlett-Packard. The reflex viewfinder looks directly through the 3x optical zoom lens courtesy of a beam-splitter. The 2in LCD screen can be tilted through 90°, while digital images are recorded in colour, monochrome or sepia. Hewlett-Packard sold the same camera as the PhotoSmart 912.



Small but well specified, the Nikon Coolpix 880

Nikon Coolpix 880

This is a small camera with a 1.8in LCD screen to preview and view the pictures, plus a top-mounted mono LCD to show camera settings, modes and available frames. The optical viewfinder offers a parallax correction frame for close shooting and zooms with the 2.5x optical zoom lens. LEDs beside the viewfinder indicate autofocus and flash functions.

LAUNCHED 2000

SENSOR 3.34MP

RECORDING MEDIUM Compact Flash

POWER Li battery

PRICE AT LAUNCH £600

GUIDE PRICE NOW £10-£15

Sony Cyber-shot DSC-F505V

LAUNCHED 2000

SENSOR 3.3MP

RECORDING MEDIUM Sony Memory Stick

POWER Li battery

PRICE AT LAUNCH £750

GUIDE PRICE NOW £10-£15

The unusual feature of this camera is its huge 10x Zeiss Vario–Sonnar digital zoom lens that swivels up and down through 140°, attached to a small body containing the controls and 2in LCD screen. In this way the screen can be viewed at eye level, waist level or even with the camera held above the head. Apart from the LCD screen, there is no other viewfinder.





Minolta DiMAGE 7

The DiMAGE 7 is an attractive camera that conserves power by automatically switching off the 1.8in LCD screen on the back as the camera is raised to the eye, when a smaller viewfinder LCD switches itself on. Unlike some digital cameras of this time, the 7x optical zoom lens is operated manually and has a macro setting. The viewfinder eyepiece

LAUNCHED 2001

swivels through 90°.

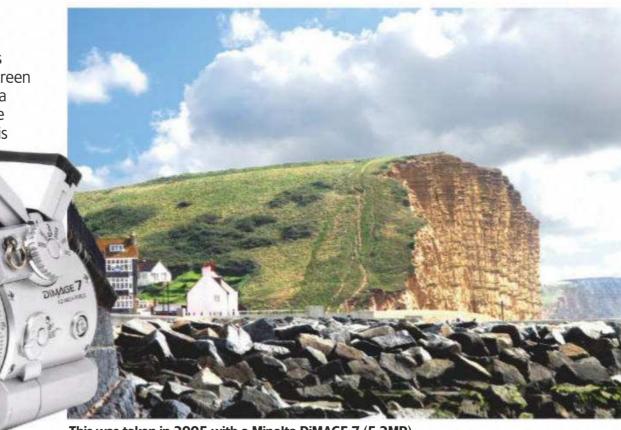
SENSOR 5.2MP

RECORDING MEDIUM Compact Flash

POWER 4x AA batteries

PRICE AT LAUNCH £950

GUIDE PRICE NOW £25-£30







Nikon Coolpix 4500

This is the sixth, smallest and best of a range whose unusually designed bodies are made in two sections. The part holding the lens swivels through 270° against the part that holds the LCD screen and camera controls. Sixteen scene-exposure modes are available, plus video with audio and a 4x optical zoom lens.

LAUNCHED 2002

Nikon Coolpix 4500, top of the

SENSOR 4MP

RECORDING MEDIUMCompact Flash

POWER Li battery

PRICE AT LAUNCH £600

GUIDE PRICE NOW £25-£40

Fujifilm FinePix S602Z

Unlike the square pixels used in a conventional CCD, Fujifilm's SuperCCD in the FinePix uses eight-sided, honeycomb-shaped pixels which allow a higher horizontal and vertical resolution to be achieved. In this way, the 3.1MP SuperCCD in the camera is claimed to produce a 6MP image. The camera offers a 1.8in LCD screen, switchable with a second LCD in the viewfinder and 6x optical zoom lens.

LAUNCHED 2002

SENSOR 3.1MP

RECORDING MEDIUM Compact Flash

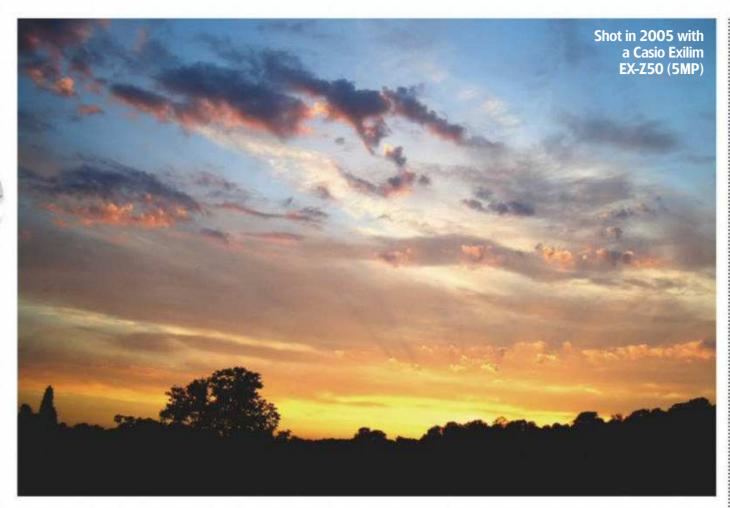
POWER 4x AA batteries

PRICE AT LAUNCH £700

GUIDE PRICE NOW £25-£30







Casio Exilim EX-Z50

LAUNCHED 2005

SENSOR 5MP

RECORDING MEDIUM

SD cards

POWER Li battery

PRICE AT LAUNCH £220

GUIDE PRICE NOW

£10-£15

The craze at this time for creditcard-sized cameras - pioneered by photo companies including Pentax, Canon and Olympus crossed over into the electronics manufacturers with cameras like the EX-Z50. It offers a 2.5in LCD screen and a 3x optical Pentax zoom lens. The camera should come with a cradle onto which it is mounted for battery charging and easy viewing of images on its LCD screen.



The Casio Exilim EX-Z50, one of many credit-card-sized cameras from this era

CHOOSING AND USING

- Old digital cameras can be temperamental. Check that all functions are working before buying.
- When using a low megapixel camera, fill the frame with the subject to avoid having to crop the image later.
- Be aware that older LCD screens, on camera backs and in some viewfinders, can be difficult to view in bright light.
- Invest in a multi-card reader that accepts Compact Flash cards, SD cards and older memory sticks.
- A 3.5MP camera can yield good quality 10x8in images with a little interpolation, or if printed at 200dpi.
- If you are happy with smaller images, like old-time film enprints, as low as 2MP still works.
- Make sure the camera you buy comes with its battery.
- Buy a universal charger (around £10-£15 on eBay) to charge older, obscure battery shapes and sizes.
- For cameras powered by AA batteries, use rechargeables because early cameras can be very power hungry.

AF-S Nikkor lens

LAUNCHED 2004

SENSOR 6MP

RECORDING MEDIUM

Compact Flash

POWER Li battery

PRICE AT LAUNCH

GUIDE PRICE NOW £50-£70 (body only)



Nikon D70

With a price that beat the magical £1,000 mark, the D70 was the first Nikon DSLR aimed purely at consumers, rather than being aimed at the professional market. Anyone familiar with later Nikon DSLRs, will immediately recognise the layout of controls and their use, and true to the Nikon philosophy, the D70 accepts F-mount lenses, both manual and autofocus. Of all the cameras listed here, this is the best workhorse even today.

Olympus SP-510 UZ

LAUNCHED 2006

SENSOR 7.1MP

RECORDING MEDIUM SD cards

POWER 4x AA batteries

PRICE AT LAUNCH £260

GUIDE PRICE NOW

This palm-sized camera is styled like a small SLR. It has a 2.5-inch LCD screen switchable with a tiny LCD in the viewfinder and sports a 10x optical zoom lens with a fine-zoom option that increases the range to 15x. For easy use, there are 21 scene modes, a macro setting and an image stabilisation indicator.



SP-510 UZ, a tiny palm-size **SLR** lookalike

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EXPERIENCE BETTER





H&Y magnetic filter frames

They're intended to change the traditional filter slot into a quick-release filter system. **Michael Topham** gives H&Y's magnetic filter frames a try

very now and then a new product arrives on the market that's so useful it makes you wonder why it was never thought of before. This is exactly how I felt when I used Manfrotto's XUME filter holder system for the first time a year ago, which uses the power of magnetic force to lock filters onto lenses quickly and easily. The idea is simple, but effective. A magnetic adapter ring screws onto the front of your lens, while the filter itself screws into a metal filter holder. These two parts then snap together securely and can be pulled apart with ease – significantly reducing the time and effort involved with screwing a filter onto the front of your lens and vice versa. This system is all well and good if you use circular screw-in filters, but what if you've invested in larger filters of the 100x100mm or 100x150mm variety that slot and hold in position via a filter holder? This is what Chinese filter manufacturer H&Y has looked to

overcome with its magnetic filter frames, which have caused quite a stir with landscape photographers who'd like a quicker, easier and more efficient way of attaching filters out in the field. So how exactly has H&Y achieved this feat, and more importantly, has it been successful?

Magnetic frames

H&Y's quick-release filter system centres on its magnetic filter frames, which are available in two sizes and cater for those who use either 100x100mm or 100x150mm filters. The magnetic filter frames, which consist of two magnetic sides and non-magnetic top and bottom sections, are compatible with both glass or resin filters and are designed for filters no thicker than 2mm. Once the magnetic frames have been pushed onto the side of your filter, they then clip into top and bottom frame sections to form a border around the edge of

your filter, safeguarding the edges from getting chipped and offering extra protection from glass filters shattering, should they get knocked or accidentally dropped. A fair amount of force is required to clip the sides onto the top and bottom sections, but once attached you can rest assured knowing they won't budge or work loose. Of course, it's all very well to fit a filter with a magnetic filter frame, but without magnets on your filter holder there's nothing to stop it from plummeting to the ground. I'll touch on the K-series filter holder that H&Y makes shortly, but the great news for those who already own a Lee Filters, Formatt-Hitech, or NiSi filter holder is that they can be modified

Holder adapter strips

Modifying your filter holder to accept a filter equipped with an H&Y magnetic

to accept H&Y's magnetic filter frames using

what are known as holder adapter strips.



K-series filter holder

IF YOU don't already own a filter holder, or one that's compatible with H&Y's magnetic filter frames through the use of magnetic holder adapter strips, you may want to consider H&Y's K-series holder. It features its own HD MRC CPL – a 95mm polarising filter made from German Schott B270 glass that when inserted can be adjusted via a smooth geared mechanism, preventing you from having to touch the filter. The holder is supplied with four adapter rings (67mm, 72mm, 77mm and 82mm), along with a cover plate that's exchanged for the polarising filter when it's not being used. The holder also features a foam gasket above and below the hole of the fascia to create a light-tight seal with long-exposure filters. As I discovered, this is slightly raised from the magnetic strips, meaning there's a small gap between the magnetic filter frame and magnetic filter holder strips when attaching a filter that has its own gasket attached, such as the Lee Filters Big Stopper. Using my modified Lee Filters holder with holder adapter strips proved to be the more secure magnetic set-up of the two.





filter frame only takes a few minutes and is outlined in our step-by-step guide below. Essentially all you need to do is unscrew your existing filter holder slots and replace these with H&Y's magnetic holder adapter strips, which are made specially for the holder you use. In the case of my Lee Filters holder, two foam gaskets were also supplied and fitted above and below the hole of the fascia, which are especially important when using either the Lee Super, Lee Big or Lee Little Stopper ND filters. The purpose of these gaskets is to provide protection against light intrusion during long-exposure photography and allows the soft gasket fitted to the rear of the filter to squeeze against the gasket fitted to the filter holder. The gaskets are self-adhesive and can be peeled off if you'd like to return your filter holder back to its original condition with its original filter holder slots. With the magnetic frames fitted to your filters and the holder adapter strips fitted to your filter holder, you're ready to take full advantage of being able to quickly snap filters into place. The benefit of

the magnetic system goes beyond attaching filters quickly and easily. You'll notice on the side of the magnetic frames there are lines and arrows, which can be used as a form of measurement against the lines and arrows on the holder strips attached to your filter holder to ensure a filter, such as an ND grad, is used at exactly the same position between shots. Another great thing about the magnetic frames is that they allow you to securely stack filters one on top of the other, plus you can adjust their position by sliding them up and down without feeling like they're going to fall off.

In use

Once I'd fitted my Lee Filters Big Stopper, Super Stopper and set of ND grads with magnetic filter frames and modified my Lee Filters filter holder to accept them, I ventured to North Yorkshire to find out how the system fared in use. Within minutes of setting up the camera and pulling my Big Stopper fitted with an H&Y magnetic filter frame from my filter pouch, I began to value the convenience of

CONVERT YOUR FILTER SYSTEM FOR USE WITH H&Y FRAMES



1 Remove the filter slots

Start off by placing your filter holder on a flat surface. Use a flat-head screwdriver to loosen the screws that secure the filter slots to the filter holder. Once the screws are removed, place the slots and screws in a sealed bag so you can keep them safe and reuse them again.



2 Unpack the contents

Open the contents within the H&Y holder adapter strips box. You'll find the contents divided into two smaller boxes – one of which contains a set of screws and screwdriver. In the other you'll find the magnetic strips. Separate the larger screws from the smaller ones.



3 Secure the metal strips

Pick up the flatter of the two metal strips (the ones that aren't marked with white lines) and locate these soft side down with the holes of your filter holder. Use the larger, longer screws to secure these metal strips to the filter holder with the supplied screwdriver.

FILTER HOLDER TEST

Testbench





'The benefit of the magnetic system goes beyond attaching filters quickly'

offering my filter up to my filter holder and it snapping into place, while being able to pull it off again in a fraction of a second when recomposing or attaching a different filter. The quick-release snap-on, snap-off nature of the system speeds up your workflow when working with long-exposure filters. And by handling the filter by the frame rather than the filter itself, it reduces finger marks and gives reassurance that your expensive filter is better protected should it slip from your grasp. The magnetic force is strong to the point you won't be afraid that the filter frame is going to slip or fall out of the holder, and you're provided with a securing screw at the side that can be used to keep the filter mounted closest to the lens locked from sliding up or down. You'll just need to make sure that this engages with the edge of the filter frame and doesn't slip beneath, which did happen to me a couple of times. I experienced no sign of any slipping when three filters were mounted on top of one another, and a detailed inspection of my results confirmed that no shots suffered from any light intrusion.

Our verdict

If you're a regular user of 100x100mm or 100x150mm filters and you would like a faster, easier and more convenient way of attaching your filters to your filter holder, H&Y's magnetic filter frame system is a great solution. Not only will you find that it speeds up your workflow, allowing you to painlessly remove a filter and reattach it in seconds. there's also the potential to stack filters on top of one another and align them with the markings on your filter holder to create results with better consistency. What's more, the magnetic frames themselves offer better protection for your filters and help prevent damage and troublesome fingerprint marks. I did find that the magnetic filter frames needed a little persuading to fit my filters though. Also, because all the top of the filter frames look identical, I found it difficult to know which filter was which in my filter pouch. Some may find themselves doing what I did, which was to add sticky labels or coloured stickers to the top of the magnetic filter frames for quick, instant referral. If you



Amateur
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Testbench
Recommended

already own a filter holder that's supported by H&Y's holder adapter strips, converting it to accept H&Y's magnetic filter frames isn't expensive (£15), but this cost can soon add up – with 100x100mm filter frames costing £23 each and 100x150mm filter frames costing £25 each. If you own a small number of filters, I'd say it's well worth the money for the convenience and practicality these magnetic filter frames bring to shooting outdoors; however if you own many filters it could add up to be rather costly. Magnetic filter frames certainly seem the way forward for landscape photographers and it's great to see a company like H&Y making its product available to a wide range of users without forcing people to buy a new filter holder.



4 Attach the foam gaskets

Take the thin metal strips with the white markings and place these on the flat metal strips you've just secured. Use the remaining smaller screws to secure these strips top and bottom. Next secure the supplied foam gaskets above and below the fascia of the filter holder.



5 Remove the backing tape

Once the magnetic adapter strips and gaskets are in place, screw the filter lock in at the side. You're now required to extract the 3M backing tape from the groove of all four frame sides. Push the top section of the filter frame onto the uppermost edge of the filter.



6 Align the frame sections

With the star at the top of the bar, align both side filter frames to the edge of the filter and click the hooks into the upper frame corners. Last, align the bottom frame section to the bottom of the filter and click the hooks into the corners. Give the filter a wipe-over with a cloth.

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Kaiser's version costs £46, but generic options are

much cheaper.

Kaiser R60 LED Ring Light DC in The light can be powered off a 5V AC adapter.

At a glance

- Macro ring light
- Continuous LED lighting
- Uses 4x AA batteries
- Fits lenses with 49–67mm threads

Andy Westlake tries out a continuous light for macro photography

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ANYONE who's tried their hand at close-up photography will know that lighting is often a problem. It's often necessary to shoot at small apertures for

extended depth of field, perhaps combined with high shutter speeds to minimise blur from subject movement or camera shake. This means either shooting at high ISO under ambient light, or investing in some kind of macro light set-up. But these tend to be pricey: even the cheapest macro ring flash from a mainstream brand will set you back the best part of £300.

Dimmer switch

A single rotary control is used for turning the light on and adjusting the output.

Kaiser has come up with an alternative, in the shape of the R60 Ring Light. This self-contained unit uses 60 daylight-balanced LEDs that encircle your lens to give even, shadowless light for close-up photography. Because we're talking about continuous lighting, not flash, you can see the effect in the viewfinder while you're shooting, and focusing should be considerably easier too.

With the batteries installed the unit weighs 260g, which is entirely manageable, although I'm not sure I'd attempt to use autofocus on a lens with an extending barrel. Build quality is perfectly decent, with the bulk of the unit made from black plastic, aside from the frosted plastic light ring and the metal lens adapters. However the dimmer on our review sample felt a bit scratchy.

Operation couldn't be simpler: screw an adapter ring onto your lens, slide on the light, fire it up and shoot away. In use, the R60 quickly reveals its strengths and limitations. As with all continuous lights, it shows you exactly what you're getting, but it's also not particularly powerful, so unlike with flash you'll still find yourself having to push up the ISO. With a fresh set of AAs and the output set to maximum, I needed to use ISO 1600 to achieve 1/200sec at f/8.

The R60 also sits entirely ahead of the lens's front, so you can't use it with short focal-length lenses that focus very close to the front element. The biggest problem though, is that unlike most macro flash systems there's no way to modulate the lighting effect; in other words, you can't turn down the LEDs on one side to give a degree of three-dimensionality.

Verdict

The Kaiser R60 is an intriguing approach to macro lighting, and can give some decent results for those working on a budget. However, it has some obvious flaws, most crucially the inability to control the light. It gives nice enough results, but I suspect most budding a macro photographers would outgrow it pretty quickly.



67mm.

Battery holders

Four AA batteries slot into compartments around the light. They're a tight fit and near-impossible to remove without using a knife to prise them out - a pretty basic flaw.

Right: The Kaiser R60 provides perfectly even light for macro photography





Adapter rings

Tech Talk

Tech Support

Email your questions to: ap@ti-media.com, **Twitter** @AP_Magazine and #AskAP, or **Facebook**. **Or write to** Technical Support, Amateur Photographer Magazine, TI Media Limited, Pinehurst 2, Pinehurst Road, Farnborough Business Park, Farnborough, Hants GU14 7BF

Manfrotto

ball head

What's the best type of tripod head for me?

I'm buying n

I'm buying my first decent tripod soon and I'm trying to work out which type of tripod head to go for.
Should I get a pan-and-tilt head or a ball head?
I am a fairly versatile photographer and shoot landscapes, portraits, wildlife, etc.
Some advice on the pros and cons of each type of tripod head

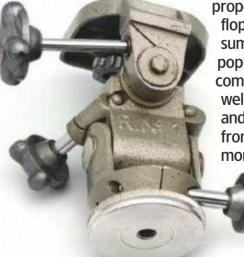


By far the most popular type of tripod head is the ball type. They are available in a wide range of sizes and can be very compact and light, if desired. They can also be relatively inexpensive, although higher-specification ones made from exotic materials can be pricey. Pan-and-tilt heads, by their very nature, are relatively bulky as they have control arms that are used to manipulate the position of the mounted camera. It's unusual to find pan-and-tilt heads as compact as even moderately small ball heads. A major advantage of a pan-and-tilt head is that the camera's up and down (tilt) and sideways (pan) attitudes can be adjusted with precision, and independently. With a ball head you have great freedom to move the camera's view around but it's pretty much impossible to adjust vertical positioning without affecting the horizontal position. Another problem is that a ball head, unless it has a highly engineered (expensive) mechanism, can settle lower than the position you thought you had locked it to. Even worse,

if you don't lock the position properly the whole camera can flop down without warning. To summarise, ball heads are very popular because they are compact and fast to set up, as well as relatively inexpensive, and there are plenty to choose

from. Pan-and-tilt heads are more precise and less troublesome, but

slower to set up. One big advantage of a pan-and-tilt head is that it's more useful if you intend to do any videography.



A vintage Gitzo pan-and-tilt head

Online image copyright options

How can you assign a copyright to an image you have shot and uploaded to the internet? I've checked out the gov.uk website but can't make much sense of the guidelines.

Shereen (AP forum)

Copyright is, in theory, set at the time the image is recorded and that normally means the photographer is automatically the copyright owner. Copyright can also be transferred. In the real world, however, it's prudent to underline that copyright status and make it absolutely clear who owns the rights to the use of the image. Indeed, you may want to assign different rights according to who wants to use the image and with respect to the purpose of its use. The first way of recording a copyright message is in the image metadata. There are metadata fields reserved for precisely this purpose. There are many image editors that include tools to enable you to record a copyright message in the metadata of each image.

Second, you can apply a watermark to the image, although this may not be acceptable depending on the use of the image. You can also use an image copyright protection and licensing company to manage your images. Just google 'image copyright registration service' for example. Unfortunately, copyright messages and even watermarks aren't enough to deter some from freeloading your work. While the internet provides great opportunities for thieves, it also has tools to combat them, to a degree. You can use services like Google Images and Tin Eye to find out where your images are on the web, including illicit use. Just upload the original, and clever

pattern matching does the rest, finding matches regardless of whether the copyright metadata has been erased or not, or even if the image has been resized. Unfortunately, what to do if you have found someone using your image without permission is really a specialist subject all of its own.

Bokeh from a phone image?

I was rather impressed to see that the latest iPhone XS can not only produce DSLR-style bokeh blur but can also let you adjust the amount of background blur after the picture is taken. Does this mean I can get rid of all my big camera gear? **Luke Young**

For once, this isn't an Apple innovation. Huawei has already introduced this feature into some of its high-end phones. Before that, artificial bokeh blur was introduced by several other smartphone makers. What Huawei and Apple have done is make the blur effect adjustable in real time, reprocessing the image after it has been taken throughout a range of blur intensities. But it is just that – an effect. It can work very well and is excellent for social-media use and other applications where critical quality isn't a high priority. In the case of large-format printing or complex images, you'd see it's not the same as genuine optical bokeh blur. For a start, bokeh isn't just behind the focused subject but parts of the scene nearer to the camera will also be blurred and the clever artificial blur algorithms don't always get that right. Nevertheless, the use of secondary image depth cameras, as on the triple-lens Huawei P20 Pro smartphone, are

Q&A compiled by Ian Burley

improving the bokeh effect with

some success.



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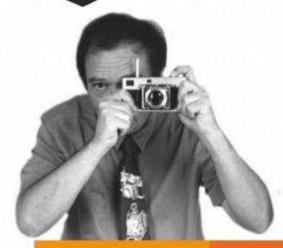


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Tech Talk



Tony Kemplen on the ...

Interchangeable lenses and a leaf shutter ensure this model is fairly unusual

he Pentina M was made in the early 1960s in East Germany. While the well-known Praktica and Exakta cameras from the GDR were sold in large numbers in the UK in the 1960s and '70s, the Pentina M was not intended for the export market, and as a consequence is quite rare here.

At first glance, you might take it to be a somewhat chunky rangefinder camera rather than the single lens reflex that is. It lacks the signature pentaprism housing that usually signals an SLR, and has a large exposure meter window across the front, making it look like an oversized compact. If you're familiar with Eastern Bloc cameras from the Cold War era, you'll probably recognise its angular features.

As well as missing the pentaprism 'hump' of most SLRs, the Pentina M breaks from the norm when it comes to the shutter. Instead of the expected focal plane shutter, a leaf shutter sits just inside the lens mount. There are plenty of examples of SLRs that use leaf shutters, the long-running Zeiss Contaflex

range being an obvious example, but it's unusual for this type of camera to offer interchangeable lenses. Similar cameras either have fixed lenses, or employ interchangeable front elements to change the focal length. Once mounted, the lens is secured with a breech lock, by turning a ring rather like that of the Canon FD mount. There is scope for getting the breech ring and the focusing ring confused



The Pentina M's four lenses – bought on eBay for about £60 in 2010

and ending up with the lens smashed on the floor. Clearly the makers were aware of this, as the manual contains the warning, 'Attention! Do not mistake the lens locking ring for the focusing ring.'

A 50mm f/2.8 Carl Zeiss Tessar serves as the standard lens, and a further three lenses were available in the Pentina mount. Meyer Optics made a 30mm f/3.5 Lydith and a 135mm f/4 Domigor, while an 85mm f/2.8 Cardinar was offered under the Jena brand. I'm lucky enough to have all four of them, which I bought on eBay as a job lot together with the camera for around £60 in 2010.



These four images show the field of view in each lens

It breaks from the norm when it comes to the shutter'

The exposure system is described as automatic, but it's not what we would understand by the term today. In reality it's a coupled exposure meter, with a manual needle match to change the shutter speed and aperture to suit the lighting conditions. More convenient than a separate handheld meter, but not exactly automatic. As you would expect, there is a full range of shutter speeds ranging from 1sec to

> 1/500th and on my example at least, they all seem to work.

Right from the start of my 52 cameras in 52 weeks project I've been taking a mirror selfie to show the camera actually in use. It's also become a habit to wear a different hat each time, and while I only rarely share these photos with AP readers, I'm doing so this time, as it gives a neat demonstration of the field of view of each of the four lenses.

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Tony Kemplen's love of photography began as a teenager and ever since he has been collecting cameras with a view to testing as many as he can. You can follow his progress on his 52 Cameras blog at **52cameras.blogspot.co.uk**. More photos from the Pentina M: www.flickr.com/ tony_kemplen/sets/72157626770700122/





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30mm F3.5 E Macro	E++ £119
35mm F2 Loxia Zeiss	Mint- £749 - £789
100mm F2.8 FE STM G Master OSS	5 Mint- £1,149

Canon EOS Flashguns

200E Speedlite	E+ / E++ £8
270EX II Speedlite	Mint- £59
270EX Speedlite	Mint- £39
300EZ Speedlite	E+ / E++ £9 - £15
380EX Speedlite	E+ £49
420EZ Speedlite	E+ / E++ £29
430EZ Speedlite	E+ £29
540EZ Speedlite	E+ / E++ £35 - £39
550EX Speedlite	Exc / E++ £69 - £129
580EX II Speedlite	E++ £169
580EX Speedlite	E+ £139
600FX-RT Speedlite	F++ / Mint- £259 - £279

Canon EUS Lenses	
10-22mm F3.5-4.5 EFS	E++ £259
10-24mm F3.5-4.5 Di II LD Tamron	E++ £239
11-16mm F2.8 DX ATX Tokina	E++ £259
11-24mm F4 L USM	E++ £1,949
14mm F3.1 T ED AS IF UMC Samyang.	E+ £195
15-45mm F3.5-6.3 IS STM EF-M	Mint- £99 - £119
15mm F2.8 EF Fisheye	E++ £449
16-35mm F2.8 L USM III	Unused £1,849
16-50mm F2.8 ATX Pro DX Tokina	E++ £289
16mm F2.8 MC Fisheye Zenitar	E++ £129
17-40mm F4 L USM	. E+ £319 - £329
17-50mm F2.8 Di II Tamron	
17-85mm F3.5-5.6 IS USM	15 Days £79
17mm F4.0 L TSE	E++ £1,549
18-200mm F3.5-5.6 IS EFS	15 Days £129
18-55mm F3.5-5.6 EFS III	Mint- £69
18-55mm F3.5-5.6 EFS IS	
20-35mm F2.8 ATX Pro Tokina	E+ £229

20-35mm F3.5-4.5 USME+ / E++ £129
21mm F2.8 Distagon ZEE+ / Mint £639 - £739
21111111 F2.0 DISTAGOTI ZEE+ / WIIII £039 - £739
24-105mm F4 L IS USM15 Days / E+ £299 - £349
24-70mm F2.8 Di VC USD Tamron E++ £549
24-70mm F2.8 L USM II E+ / E++ £1,049 - £1,149
24-70mm F4 L IS USM E++ £549
24-85mm F3.5-4.5 USM E++ £139
24-03HIII F3.3-4.3 USW E++ £139
24mm F1.4 L USM E+ / E++ £599 - £649
24mm F1.4 L USM MKII E+ / Mint- £849 - £949
24mm F2.8 IS USM E++ £359
24111111 F2.0 15 USIVI E++ £339
24mm F3.5 L TS-E 15 Days / E++ £499 - £699
24mm F3.5 L TS-E MkII E+ / Mint- £1,149 - £1,249
00 10 From E0 F F 0 10 HOM
28-135mm F3.5-5.6 IS USMExc / E+ £99 - £129
28-200mm F3.8-5.6 XR Tamron E++ £79
28-300mm F3.5-5.6 L IS USM E++ £1,099
28-75mm F2.8 XR Di AF TamronE+ £159
28-90mm F4-5.6 USM II E++ £49
35-135mm F3.3-4.5 Zeiss E++ £349
33-13311111 F3.3-4.3 Zels8 E++ £349
35mm F1.4 L II USM Mint- £1,049
35mm F1.4 L USME+ £689
40mm F2.8 STME++ / Mint- £109 - £129
40111111 F2.0 511VIE++ / IVIIIIL- £109 - £129
45mm F2.8 TS-E E+ £649
50-135mm F2.8 DX ATX Tokina E++ £329
50 TOOMIN 1 2.0 DX ATX TORNIA
50mm F1.4 USME+ / E++ £179
50mm F1.8 EF Mk1 E++ £99
50mm F2 ZE Macro Zeiss E++ £699
65mm F2.8 MP-E MacroE+ £679
70-200mm F2.8 L IS USM E+ £689
70-200mm F2.8 L IS USM II E++ / Mint- £1,249 - £1,369
70-200mm F4 L IS USM Mint- £639
70-210mm F3.5-4.5 USM E++ £99
70-300mm F4-5.6 IS USM E+ £179
70-000111111 4-5.0 10 051VI
70-300mm F4-5.6 L IS USME+ £739
75-300mm F4-5.6 EF III E+ / E++ £59 - £89
75-300mm F4-5.6 IS USME++ £189 - £199
75-300mm F4-5.6 USM E++ £59
80-200mm F4.5-5.6 EF II E++ £49
85mm F1.2 L USM MkII E++ / Unused £999 - £1,249
05/11/11 1 1.2 L 05/11 WIKII L++ / 01/10560 £555 - £1,245
85mm F1.4 L IS USM Mint- £1,199
85mm F1.8 USM Exc / E++ £139 - £259
90-300mm F4.5-5.6 EF 15 Days / E++ £39 - £79
90mm F2.8 Tilt-Shift Lens E++ £679
100-400mm F4.5-5.6L IS II USM E+ £1,349
100mm F2 ZE Macro ZeissE++ / Mint- £679 - £789
10011111 F2 ZE Wacio ZeissE++ / Willit- £079 - £709
135mm F2 L USM E++ £599
180mm F3.5 Di Macro AF Tamron E++ £399
180mm F3.5 EF L Macro USM E++ £789
180mm F3.5 L Macro USM E++ £799
200-400mm F4 L IS USM with Internal 1.4x Extender Lens E++ £7,989
200mm F1.8 L USM15 Days £1,489
200mm F2.8 L USM II E++ £399
300mm F2.8 L IS USM E+ / E++ £1,985 - £2,479
300mm F2.8 L IS USM MKIIE++ / Mint- £3,999 - £4,189
400mm F2.8 L IS USM E+ / E++ £3,689 - £3,889
400mm F2.8 L USM E+ £2,449
400mm F4 D0 IS USM E+ / E++ £1,839 - £1,879
500 54 LO HOMANUL
500mm F4 L IS USM MKII E+ £5,950
500mm F4.5 L USME+ £2,149
500mm F8 SP Reflex E+ £179
000 EF C.I. IC HOM.
800mm F5.6 L IS USME+ £6,489
Canon FD Lenses

Canon FD Lenses

35-70MM F3.5-4.5 FD	EXC ₺ !
35mm F3.5 EX	E+ £2
70-210mm F4 FD	E+ / E++ £25 - £79
75-200mm F4.5 FD	Exc / E+ £15 - £29
135mm F3.5 B/lock	E++ £3
135mm F3.5 FD	E+ £3
200mm F4 FD	E++ £99 - £129
300mm F5.6 FD	E+ £5
400mm F5.6 Vivitar	E+ £29

Contax SLR Lenses (AE/MM)

25mm F2.8 MM	E++ £349
28-70mm F3.5-4.5 MM	E++ / Mint- £249 - £279
28-80mm F3.5-5.6 AF	Unused / New £349 - £399
28mm F2.8 MM	E++ £199
45mm F2.8 MM	Mint- £249
50mm F1.4 AF	
50mm F2 ML Yashica	E+ £25
70-200mm F3.5-4.5 AF	E++ £299
70-210mm F3.5 SP Tamron.	
70-210mm F4-5.6 Sigma	E+ £29
70-300mm F4-5.6 AF	
85mm F1.4 MM	
100mm F2 AE	
135mm F2 (60 Year Edition).	Unused £2,379
135mm F2.8 AE	
135mm F2.8 MM	E+ / E++ £169 - £199

180mm F2.8 AE	E++	£349
180mm F2.8 MM	E++	£349
200mm F3.5 AE E+ /	E++ £129 -	£149
200mm F4 AE	Unused	£449
300mm F4 MM E+ /	E++ £269 -	£299

Digital Mirrorless

Digital Will offess	
FujiFilm X-H1 Body Only	/ E++ £1,289
	E+ £149
X-Pro2 Body Only	E+ / E++ £849 - £939
X-T1 Body + Vertical Gri	ip 15 Days / E++ £299 - £419
X-T1 Body Only	E+ / Mint- £299 - £419
	E+ / E++ £279
X-T10 Silver Body Only.	E+ £259
X-T2 Black Body + Hand	dgripE+ £799
X-T2 Black Body Only	E+ / Mint- £699 - £749
	r E++ £599
	50mm XCE+ £159
X-E2 Chrome Body Only	15 Days / E++ £189 - £269
	HLD-7 Grip 15 Days / E++ £289 - £45
E-M1 Mkll Black Body C	only E++ £1,049
E-M10 MKII Silver Body	Only E++ £289
E-M10 MkIII Black Body	Only Mint- £469
	E++ £249
OMD E-M5 MKII Black +	- ECG-2 gripE+ £599
OMD E-M5 MKII Black B	Body Only E++ £519
	Body Only E++ £499
Pen-F Silver Body Only	E+ £649
Panasonic GH5 Body +	Grip E++ £1,339
GH5 Body Only	E++ / Mint- £1,199 - £1,299
GH4 Body Only	E+ £549
G80 Body Only	E++ / Mint- £469 - £499
GF-3 Black Body	E+ £79
GX7 Body Only	E++ £219
	E+ £399
GX80 Body Only	E++ / Mint- £249 - £305
GX80 Body Only + Grip.	Mint- £289
Sony A7 Body Only	E+ £499
	Exc / E+ £689 - £789
A7R Body Only	E++ £739
	E 01.04

Digital SLR Cameras
Canon EOS 1D Mkll Body Only15 Days / E+ £179 - £249
EOS 1D MkIII Body Only E++ £449
EOS 1DS MkII Body Only E+ £449 - £479
EOS 1DX Body Only15 Days £1,499
EOS 5D MkII Infra Red Body Only (720nM) E++ £849
EOS 5D MKIII Body + BG-E11 GripE+ £1,449
EOS 5D MKIII Body Only E+ / E++ £1,299 - £1,449
EOS 5D MKIV Body Only E+ / E++ £2,289 - £2,399
EOS 5DS Body + BG-E11 GripMint- £2,099
EOS 5DS Body Only E+ / E++ £1,599 - £1,649
EOS 5DS R Body Only Mint- £1,999
EOS 600D Body Only E+ £199 - £219
EOS 650D Infra Red Body Only E++ £429
EOS 6D Body Only E+ / E++ £649 - £689
EOS 700D Body Only E+ £269
EOS 70D Body Only E++ £479 - £499
EOS 760D Body Only E++ £449
EOS 7D + BG-E7 GripE+ £359
EOS 7D Body Only E+ £349
EOS 800D Body Only
Nikon D3X Body Only E+ £1,089
D4S Body OnlyE++ £2,879
D500 Body OnlyE+ / Mint- £1,149 - £1,289
D5100 Body OnlyE+ £150
D5300 Body Only E++ £349
D5500 Body Only E++ £399
D610 Body OnlyE++ £689 - £699
D70 Body Only E++ £689 - £699
D7000 Body Only
D70S Body Only E+ / E++ £69 - £79
D7100 Body OnlyE+ / Mint- £399 - £449
D7200 Body Only E+ / E++ £549 - £669
D750 Body Only
D80 Body Only E+ £99 - £109
D800 Body Only
D800E Body OnlyE++ £1,039 - £1,099
D90 Body + MB-D80 Grip
Df Body OnlyE+ £1,289
Pentax K-01 Body Only E++ £199
K1 Body Only E++ £1,149
K100D + 18-55mm E+ £129
K100D Body Only $F++ $ \$8!

Hasselblad V

)	40mm F4 C Black	Exc / E+ £379 - £399	
)	50mm F4 CF	15 Days / Exc £249 - £299	

	E+ / E++ £799 - £849
60mm F3.5 CB	E++ £499
120mm F4 CF Macro	Exc / E++ £339 - £499
120mm F4 CFE Macro	E++ £989 - £999
150mm F4 CFi	E++ £749
160mm F4.8 CB	E++ £349
250mm F5.6 CF	E+ / E++ £299 - £349
250mm F5.6 Chrome	15 Davs £99

Hasselblad V

9035WC Complete	E+ £2,299
Super Wide C Complete	Exc £849
205TCC body + WLF + Back	E+ £2,499
500CM Gold Edition Mint- / Unused £3	,499 - £3,999
500ELM '20 Years in Space' Edition	. Mint- £1,999
553ELX Black Body Only	E+ £399
553ELX Chrome Body Only	E+ £299

Large Format Cameras

Toyo 45CF Field CameraE+	£749
45M Field CameraE+	
View C Monorail15 Days	
View G Monorail15 Days	
Horseman Digiflex Body E+ / E++ £399 -	£479
Digiflex II BodyE+	£499
VH + 65mm + 180mmE+	£749
VH + 90mm + 180mmE+	£899
Sinar F Monorail kitE+	£349
F1 Monorail E+ / E++ £195 -	£249
Flexi Cam + 70mm F5.6 Apo Silvestri E++ £	2,499
Linhof Kardan Super Color Monorail15 Days	£179
Kardan Super Color ST MonorailE+	£289
M679cc Body E++ £	2,489
Technika III OutfitE+	
Technikardan S23 MonorailE+	
Mk VII + 150mm F5.6 MPPE+	
Cambo SC 5x4 Monorail 15 Days / E++ £149 -	
SC-2 5x4 Monorail E+	
Other Truewide Camera Kapture GroupE+	
5x4 Wooden Field Camera Zone VI E++	
202 Panorama Horizon 15 Days £159 -	
Photo 360 EggMint	
Veriwide 100 Brooks E++ £	1,249

Large Format Lenses

Large Format Lenses
Schneider 47mm F5.6 Super AngulonExc £24
47mm F5.6 Super Angulon XL E++ £54
58mm F5.6 Super Angulon XLE+ £379
60mm F4 Apo Digitar E++ £44
65mm F5.6 Super Angulon E++ £279 - £29
65mm F8 Super Angulon E+ £19
72mm F5.6 Super Angulon XL E++ £59
80mm F4.0 Apo Digitar E++ £54
80mm F5.6 Apo Digitar E++ £57
90mm F8 Super Angulon15 Days £12
100mm F5.6 Symmar SE+ £18
120mm F5.6 Symmar-S E++ £29
120mm F6.8 Angulon15 Days £12
121mm F8 Super Angulon E+ £149 - £179
210mm F5.6 Symmar S Exc / E++ £119 - £24
180mm F5.6 Symmar SE+ £12
240mm F5.6 Symmar S E++ £16
240mm F9 G Claron Exc £19
Sinar 65mm F4.5 Sinaron W E++ £479
150mm F5.6 Sinaron S 15 Days / E+ £9
210mm F5.6 Symmar SE+ £14
240mm F5.6 Sinaron SE+ £34
210mm F5.6 Fujinon W E++ £28
300mm F8 Fujinon TE+ £39
Nikon 210mm F5.6 W E++ £34
270mm F6.3 T* ED E++ £39
360mm F8 T*ED + 500mm Lens Group E++ £64
65mm F4 SW E++ £44
65mm F4 W E++ £44
Rodenstock 75mm F6.8 Grandagon N E++ £34
90mm F4.5 Grandagon N E++ £39
90mm F6.8 GrandagonE+ £26
SX LF Teleconverter 150-300 Horseman E++ £8
Sany AE Lancac

10-24mm F3.5-4.5 Di II LD Tam	ronE+ £199
16-35mm F2.8 ZA SSM	E+ £729
16-50mm F2.8 DT SSM	E+ £289
16-80mm F3.5-4.5 ZA	E+ / E++ £219 - £399
16mm F2.8 Fisheye	E++ £499
18-200mm F3.5-5.6 DT	E+ £239
18-55mm F3.5-5.6 SAM	E++ £49
18-70mm F3.5-5.6 DT	E+ / E++ £49 - £59
24-70mm F2.8 Di VC USD Tamr	on Mint- £429











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55-200mm F4-5.6 Di II Tamron E++ £39
55-200mm F4-5.6 DTE+ / E++ £39
55-200mm F4-5.6 DT SAM E++ £49
60mm F2 Di II (if) Macro TamronNew £269
70-210mm F4.5-5.6 MC Cosina Mint- £49
70-300mm F4-5.6 Di VC USD Tamron. E++ £189 - £199
75-300mm F4.5-5.6 AFE+ / Mint- £59 - £79
85mm F1.4 ZAMint- £789
105mm F2.8 EX DG HSM OS Sigma E++ £279
300mm F2.8 G SSM IIE+ £4,849
500mm F8 Reflex E++ £379

F4E Body Only15 Days £149 F4S Body OnlyÉ+ £249 F100 Body + MB15 GripE+ £179

10-24mm F3.5-4.5 G AFS DX ..E++ / Mint- £429 - £449 10.5mm F2.8 G AF ED DX Fisheye E++ £299 12-24mm F4 ATX PRO SD Tokina E+ / E++ £169 - £199 12-24mm F4 G AFS DX ED......E++ / Mint- £319 - £399 14-24mm F2.8 G AFS ED.....Exc / E+ £699 - £749 15mm F2.8 ZF.2 ZeissUnused £1,749 16-35mm F4 G AFS ED VR...... E++ £789 16-85mm F3.5-5.6 G ED VR AFS DX...E++ £219 - £239 16mm F2.8 AFD Fisheye..... E+ / E++ £429 - £449 17-55mm F2.8 G AFS DX IFED.....E+ £239

18-140mm F3.5-5.6 AF-S G ED VR DXE+ / Mint- £229 - £259 18-300mm F3.5-6.3 AFS DX VR......Mint- £499 - £519 18-35mm F3.5-4.5 AFD.....E+ £199 18-35mm F3.5-4.5 AFS...... E++ £459 18-70mm F3.5-4.5 G AFS ED DX Exc / E+ £49 - £75 20mm F2.8 AFD..... E++ £289 21mm F2.8 Milvus ZF.2 ZeissUnused £1,199 24-120mm F3.5-5.6 ED AFDE+ £129 24-120mm F4 AFS G ED VR Exc / Mint- £449 - £549 24-70mm F2.8 G AFS ED......E++ £849 - £889 24-85mm F3.5-4.5 G AFS......Exc £79 24-85mm F3.5-4.5 G AFS VR..... E++ £269 24mm F2.8 AFD..... E++ £229 24mm F3.5 ED PC-E..... E++ £999

25mm F2.8 ZF Zeiss......E+ / Mint- £379 - £449

25mm F2.8 ZF.2 Zeiss E++ £549 28-100mm F3.5-5.6 AFG......E+ £59 28-105mm F2.8-3.8 MC Cosina ..E++ / Mint- £59 - £69 28-300mm F3.8-6.3 Di VC PZD Tamron E++ £399 28-70mm F3.5-4.5 AFD.....E+ £69 28-80mm F3.5-5.6 Asph Tamron...... E++ £29 28mm F1.8 G AFS...... Mint- £349 28mm F2 ZF.2 Zeiss Mint- £649 28mm F2.8 AF...... E+ / E++ £139 - £149 28mm F2.8 AFN..... E+ / E++ £129 - £139 35-105mm F3.5-4.5 AF......E+ £49 35-70mm F2.8 AFD15 Days £89 35mm F1.4 G AFS......E++ / Mint- £799 35mm F1.8 G AFS DX E+ / E++ £109 - £119 45mm F2.8 D PC-E ED Macro..... E++ £1,049 50-100mm F1.8 DC HSM A Sigma..... E++ £749 50mm F1.4 ZF Zeiss..... E++ £339 50mm F2 ZF Makro Planar Zeiss Mint- £549

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100mm F2 ZF.2 Macro Zeiss..... E++ £749 - £949

100mm F2.8 ED UMC Macro Samyang Mint- £279 105mm F1.4 E ED AF-SMint- £1,499 - £1,589

-300mm F4-5.6 G AFS VR.....

F5 Body Only E++ £349 Nikon Manual Lenses

Nikon AF

)	135mm F2 D AF DC
)	200-400mm F4 G VR AFS IFED
)	200-400mm F4 G VR II AFS IFED
9	300mm F2.8 G AFS ED VR
)	300mm F2.8 G AFS ED VR II
)	300mm F2.8 IFED AF Exc / E
)	300mm F2.8 IFED AF-I
)	300mm F4 AF ED
)	300mm F4 AFS IFED
))	400mm F2.8 AF-S E FL ED VRE++ / Mint- £
))	600mm F4 AFS IFED DII
j	600mm F4 E FL ED VR AFS

135mm F2 Apo ZF.2 Zeiss	Mint- £1,049
135mm F2 D AF DC	Exc £489
200-400mm F4 G VR AFS IFED	E+ £1,799
200-400mm F4 G VR II AFS IFED.	Mint- £3,199
300mm F2.8 G AFS ED VR	E+ £2,099
300mm F2.8 G AFS ED VR II	E+ £2,749
300mm F2.8 IFED AF	Exc / E+ £749 - £949
300mm F2.8 IFED AF-I	E++ £1,299
300mm F4 AF ED	15 Days £199
300mm F4 AFS IFED	E++ £499
400mm F2.8 AF-S E FL ED VRE++	/ Mint- £9,699 - £9,899
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600mm F4 E FL ED VR AFS	Mint- £9.589

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35-70mm F3.5-4.8 AIS	E++ £59
35mm F2.8 PC Shift	Exc / E+ £149 - £179
43-86mm F3.5 Al	E+ £69
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14mm F2.8 SMC DA E++ £399
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16-45mm F4 DA ED ALE++ £159 - £169
16-45mm F4 ED AL SA Samsung E++ £99
16-50mm F2.8 A* DA SDME++ / Mint- £369 - £549
17-50mm F2.8 XR Di II Tamron E++ £169
17-70mm F4 DA AL (IF) SDM E++ £239
18-50mm F4-5.6 DA DC WR RE Mint- £99
18-55mm F3.5-5.6 DA ALE+ £29
24mm F1.4 ED AS UMC Samyang E++ £339
28-70mm F2.8 SMC AL FA* E+ £549
28-80mm F3.5-5.6 FAE+ / E++ £49
28-80mm F3.5-5.6 FAJ AL E++ £49
35mm F2.4 DA AL E++ £79
40mm F2.8 SMC DA XSE++ / Mint- £149 - £179
50-200mm F4-5.6 DA ED15 Days £29
50mm F1.8 SMC DA E++ £79
55-300mm F4.5-6.3 DA PLM WR E++ £289
60-250mm F4 ED (IF) SDM E++ £679
80-200mm F4.7-5.6 AE+ £49
80-200mm F4.7-5.6 SMC FE+ £49
85mm F2.8 SMC FA Soft Focus E++ £349
100-300mm F5.6-6.7 MC Cosina Mint- £59
200mm f2.8 DA* ED (IF) SDME++ / Mint- £599 - £649

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X-HI XFI6-SSmm Kit	£410		
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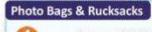
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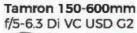


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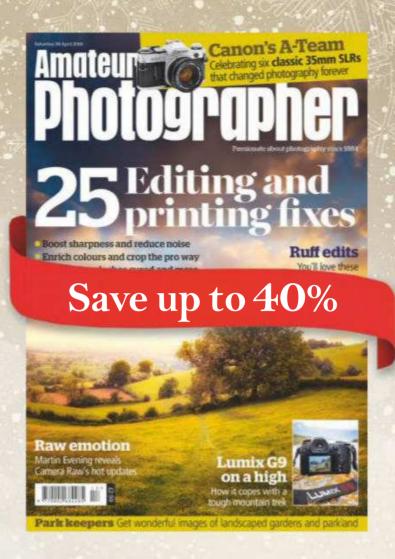
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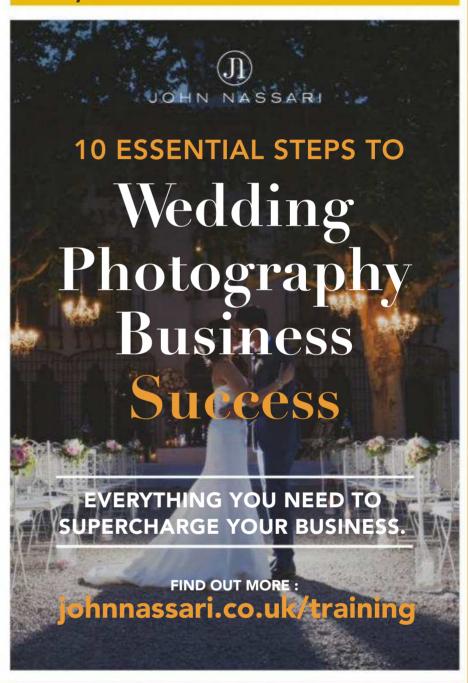
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Inal Analysis Roger Hicks considers... 'Retreat from Moscow', 10.41 hours and 10.41 hours and

1941, by an unknown Wehrmacht photographer



n 1945, Odhams Press published The Victory Book. They'd presumably been planning it for a while, but equally, they got it out in a rush. Enough of a rush that the copyright notice appears before the end: they added the last eight pages just after VJ (Victory over Japan) Day, a (very) few weeks after VE (Victory in Europe) Day.

You can still find it for a few pounds. As well as being a slice of history, it is an astonishing book of photography. Although some pictures are surprisingly excellent, others are equally surprisingly awful: soft, grainy, blurry from poor focus or camera shake. The latter often have far more impact than the former.

Imagine the retreat from Moscow. You're utterly exhausted and at least half starving on a claustrophobic road. You've lost countless friends and comrades, often in the most hellish conditions. You're

freezing, perhaps literally to death. There are Russian snipers everywhere. Stray from the column, perhaps to relieve yourself, and you've a fair chance of getting your throat cut. Of course you might be an ardent Nazi, but the chances are, like the vast majority of soldiers in World War II, you are a more or less unwilling conscript.

Taking pictures to the end

And yet, someone takes a picture. Why? How? Because they're a photographer. It's what they do. I don't think I am a brave man, but I am reasonably confident that as long as I had breath in my body and film in my camera, I would go on taking pictures.

It might be the last thing I did before I shot myself, driven mad by hunger, fear and grief. But I would go on taking pictures. To be honest, I wouldn't know where else to look for this picture. It's

presumably in an archive somewhere, but where? Odhams became a part of IPC, as did *Amateur Photographer*. But in the UK we don't have an equivalent of the wonderful US Library of Congress, with its vast copyright-free holdings. That's why the quality is so bad here: it's scanned from the book.

The more you look at it, the more it draws you in. The iron-wheeled horsedrawn gun reminds us that World War II was nothing like as mechanised as it is sometimes portrayed. The trudging figures in their voluminous capes could as well have been with Napoleon. The poor quality makes it seem both authentic and dream-like: we cannot fully imagine anything so awful. If we could, we would go mad. As World War II showed, the War To End Wars didn't. No war ever will. But sometimes we can learn from our past mistakes.

Roger Hicks has been writing about photography since 1981 and has published more than three dozen books on the subject, many in partnership with his wife Frances Schultz (visit his new website at www.rogerandfrances.eu). Every week in this column Roger deconstructs a classic or contemporary photograph. Next week he considers an image by Eran Gilat

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